4. Peak Transmit Output

4.1. Test Equipment

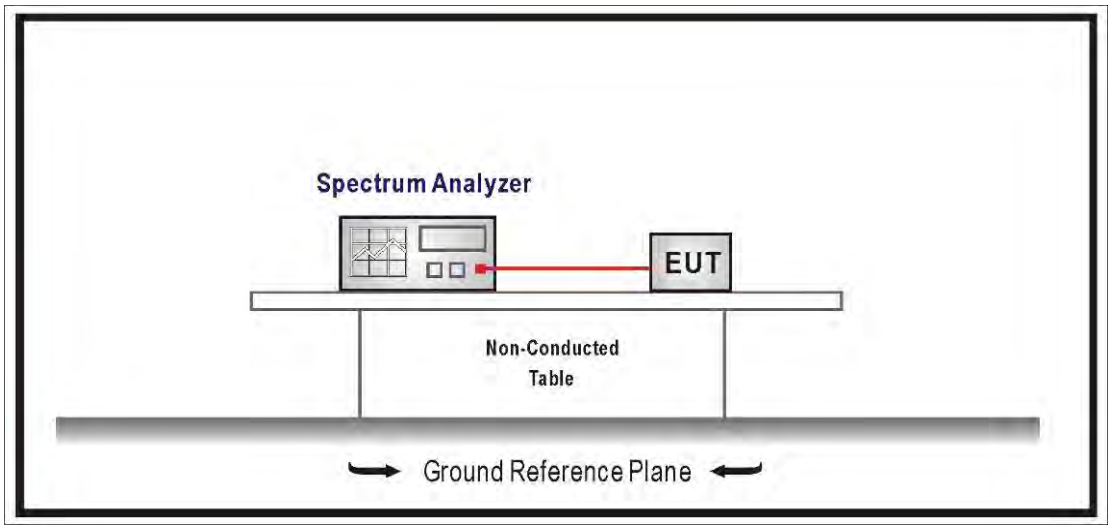
The following test equipment are used during the radiated emission tests:

Peak Transmit Output / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23

Note: All equipment that need to calibrate are with calibration period of 1 year.

4.2. Test Setup



4.3. Limits

1. For the band 5.15-5.25 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

2. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. The maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. For the band 5.25-5.35 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 250 mW. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4. For the band 5.725-5.850 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4.4. Test Procedure

The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of 789033 D02 V01R02 for compliance to FCC 47CFR Subpart E requirements. The Method SA-1 of the Maximum conducted output power was used.

Set RBW=1MHz, VBW=3MHz with RMS detector and trace average 100 traces in power averaging mode. Set span to encompass the entire emission bandwidth (EBW) of the signal. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

4.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

4.6. Test Result

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

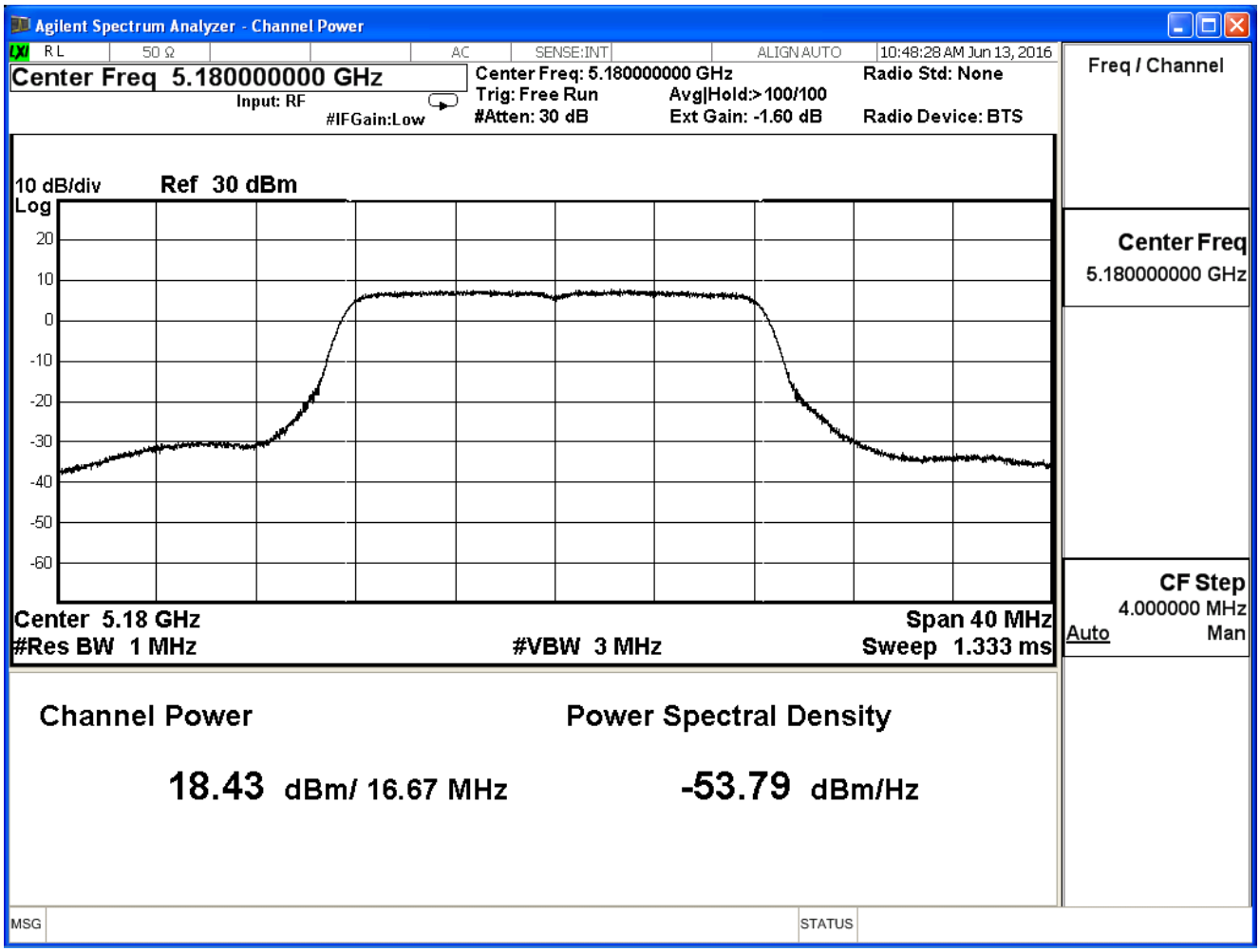
802.11a (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.43	≤30
44	5220	19.23	≤30
48	5240	18.90	≤30

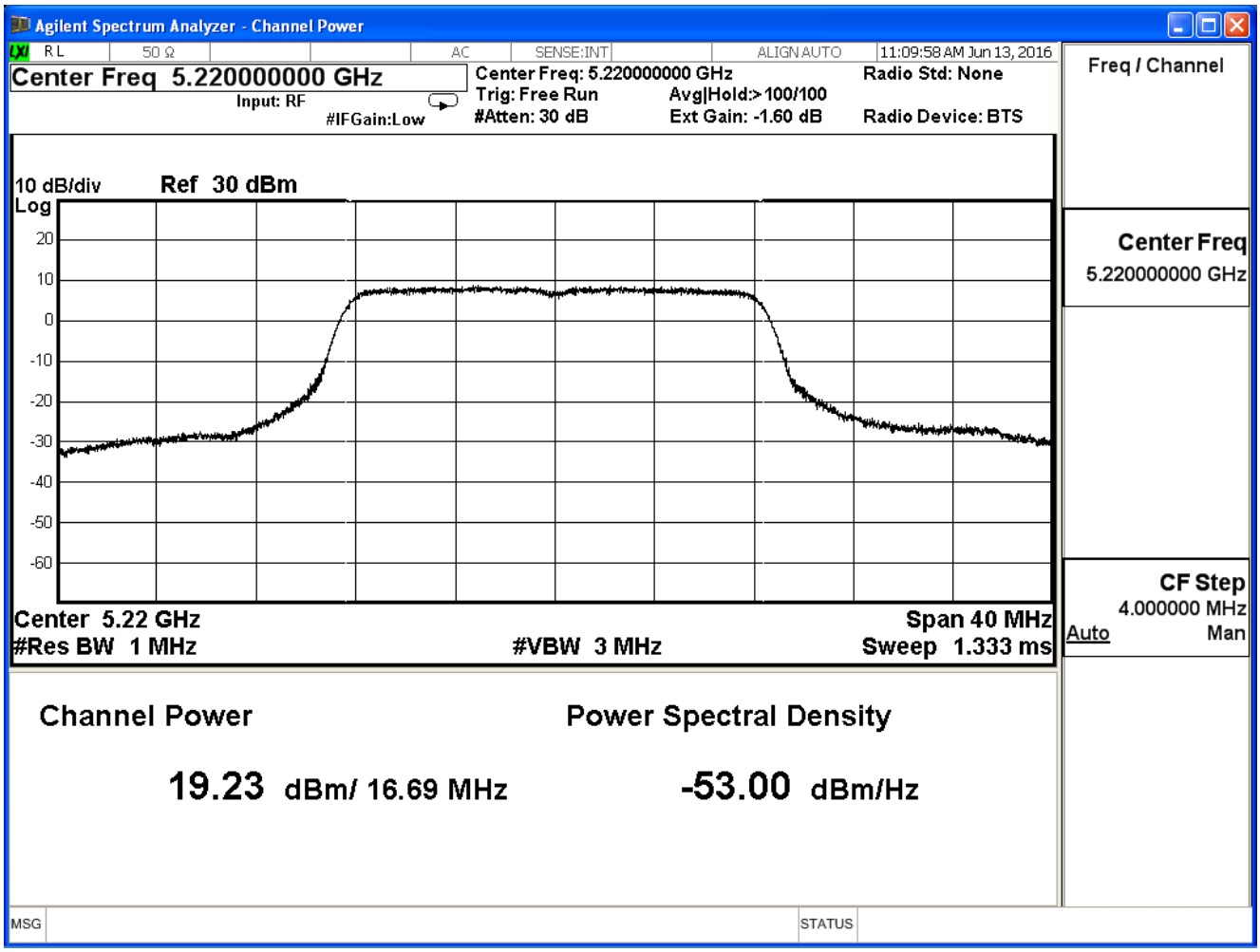
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	18.43	--	--	--	--	--	--	≤30dBm
44	5220	19.23	19.18	19.11	19.00	18.95	18.90	18.78	
48	5240	18.90	--	--	--	--	--	--	

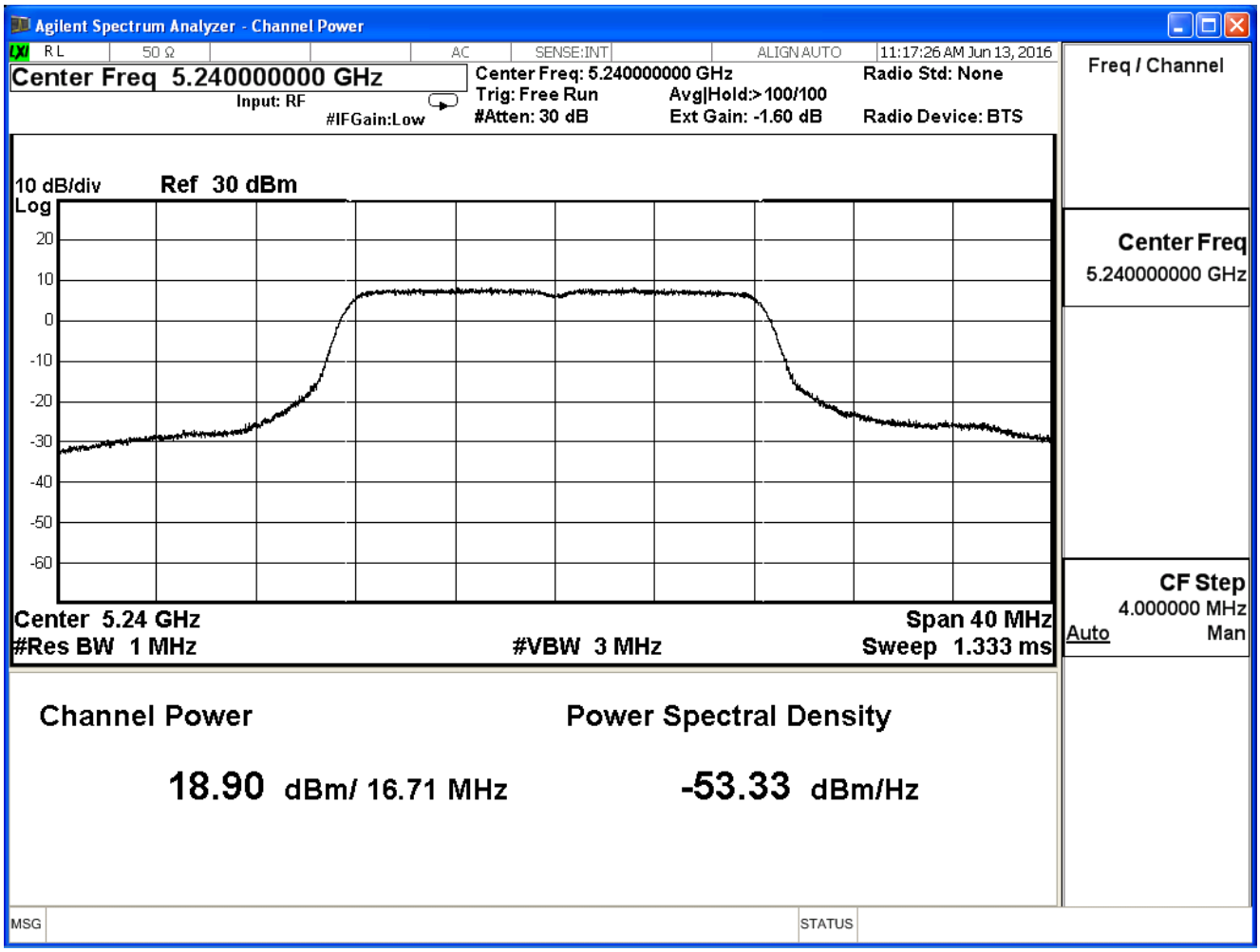
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

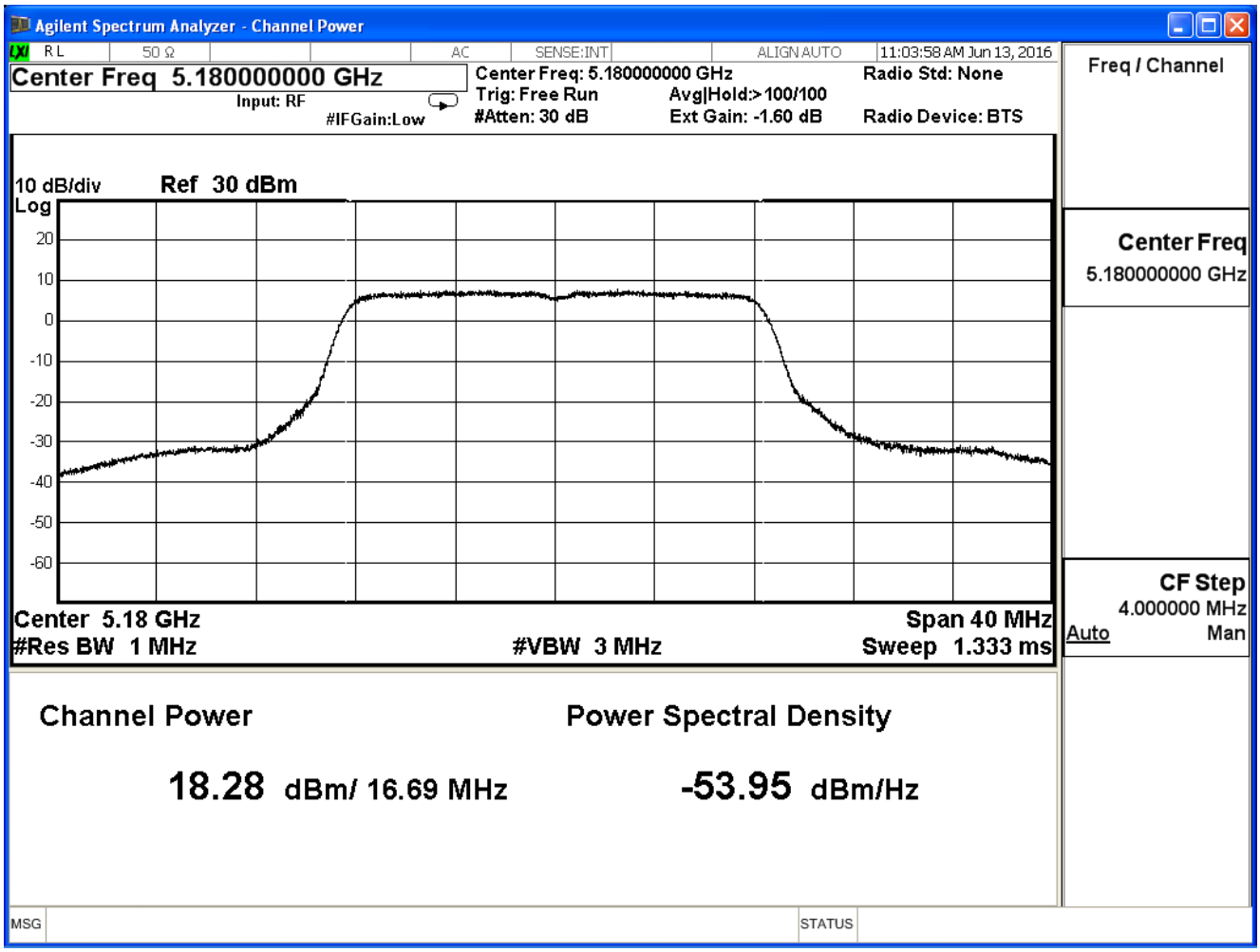
802.11a (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.28	≤30
44	5220	19.21	≤30
48	5240	18.92	≤30

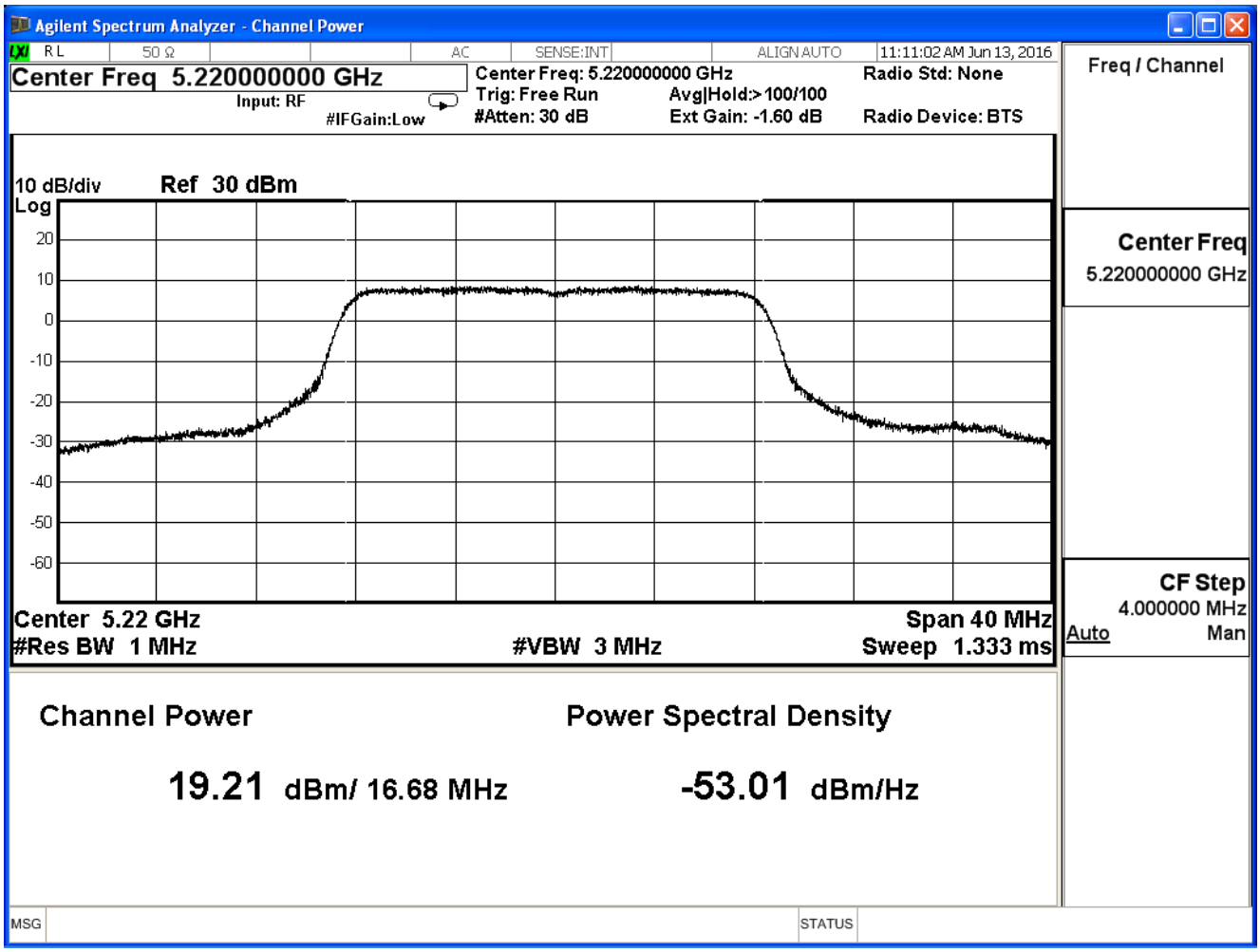
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	18.28	--	--	--	--	--	--	≤30dBm
44	5220	19.21	19.14	19.05	18.98	18.90	18.82	18.68	
48	5240	18.92	--	--	--	--	--	--	

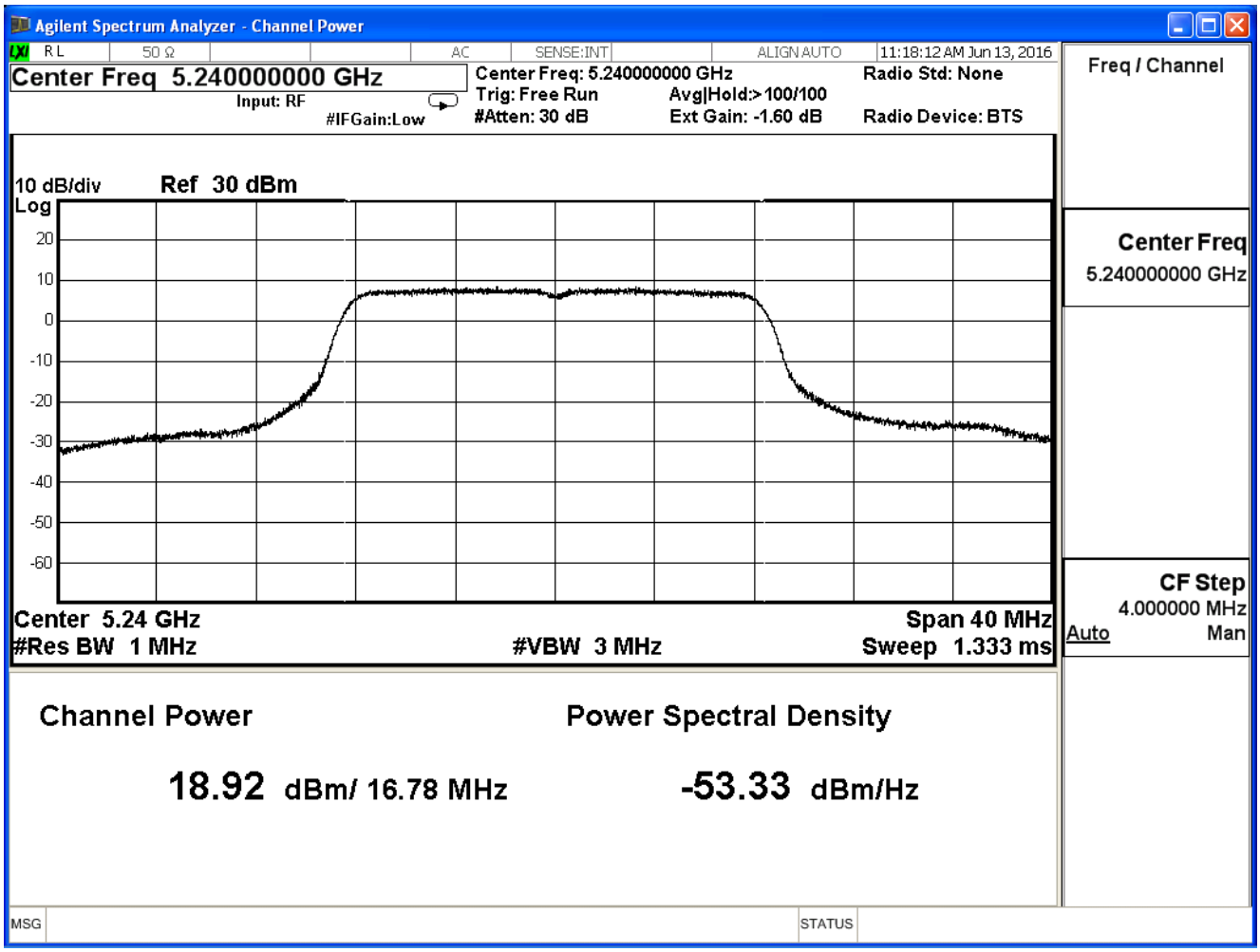
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

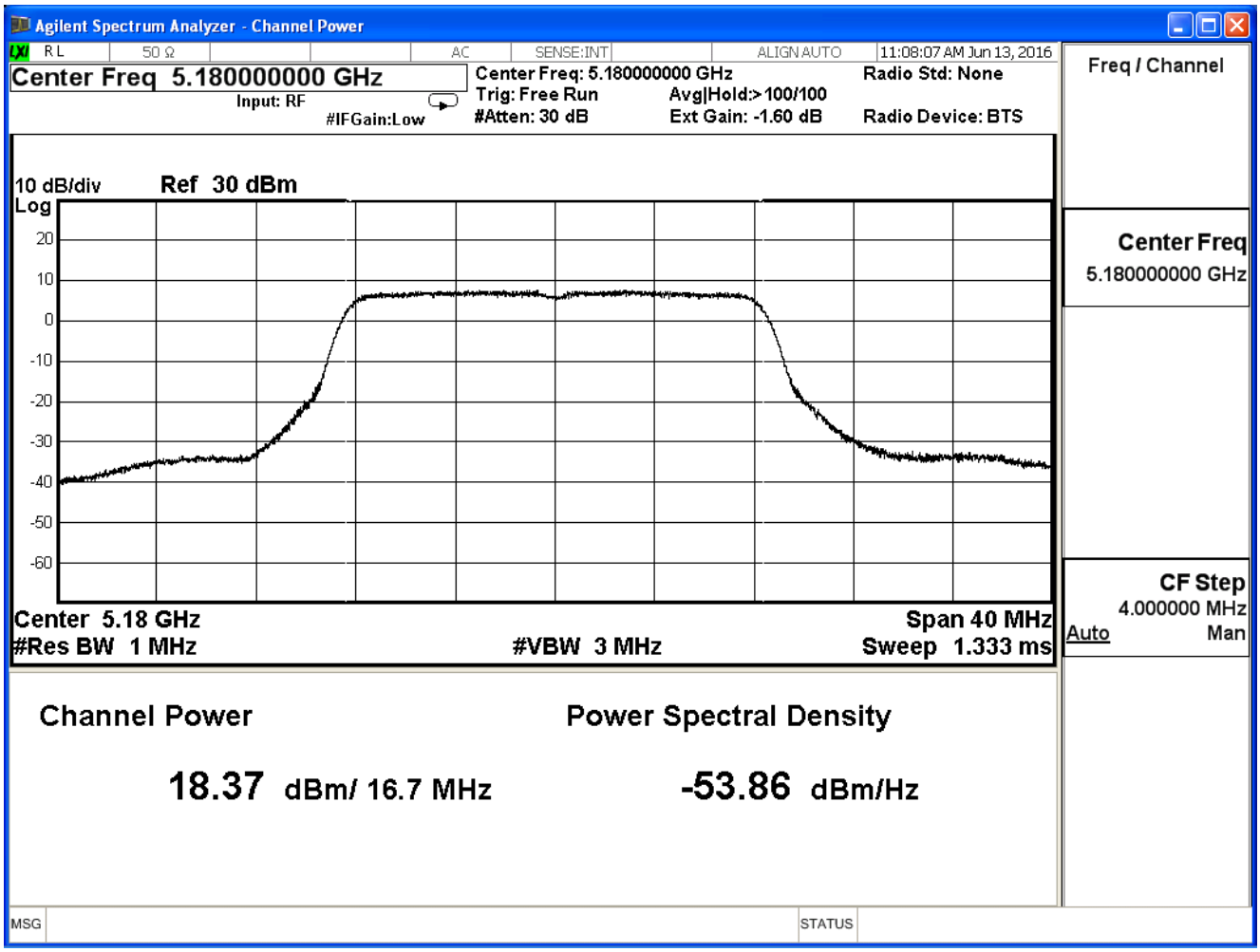
802.11a (ANT 2)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.37	≤30
44	5220	19.06	≤30
48	5240	19.12	≤30

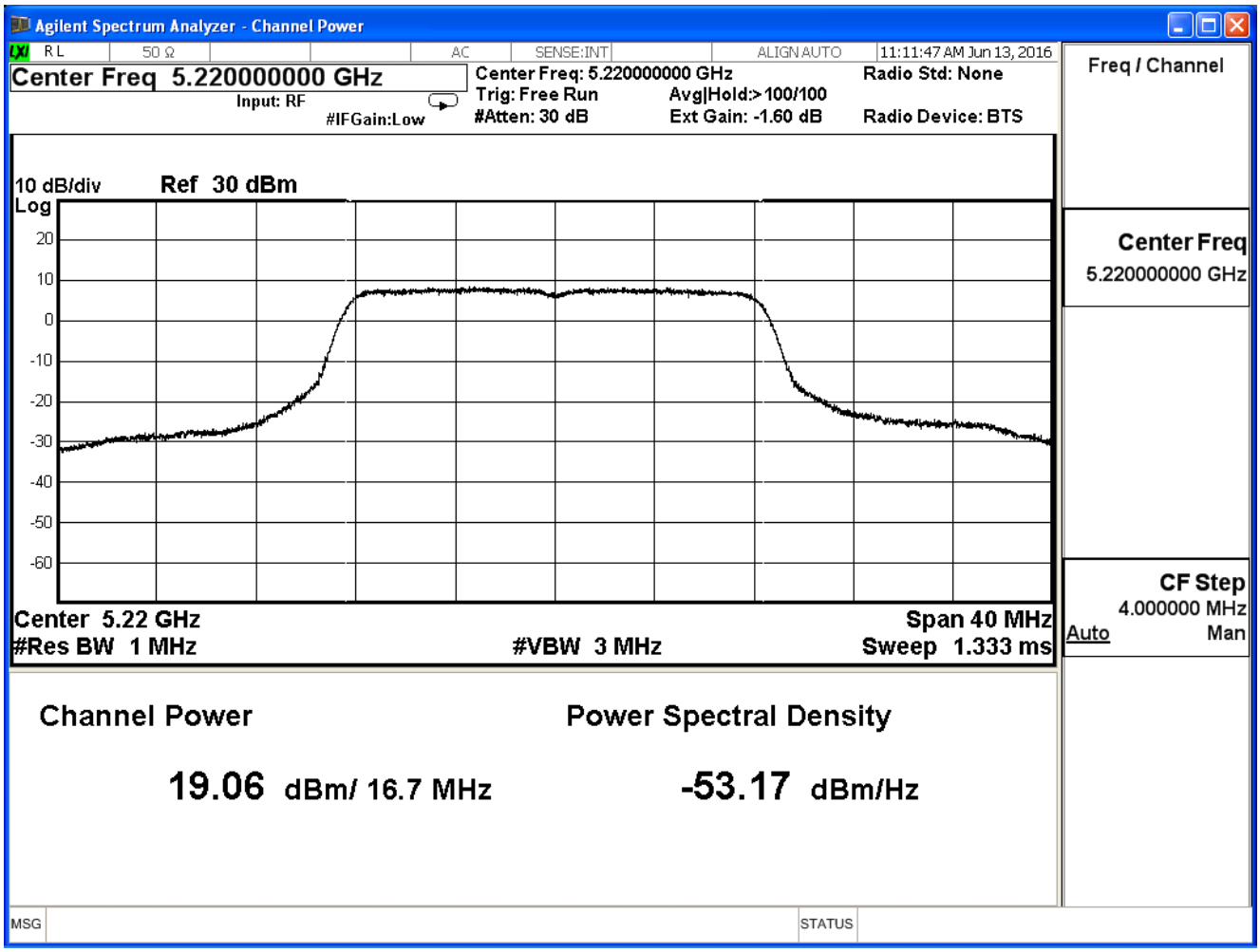
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	18.37	--	--	--	--	--	--	≤30dBm
44	5220	19.06	19.01	18.92	18.75	18.68	18.55	18.42	
48	5240	19.12	--	--	--	--	--	--	

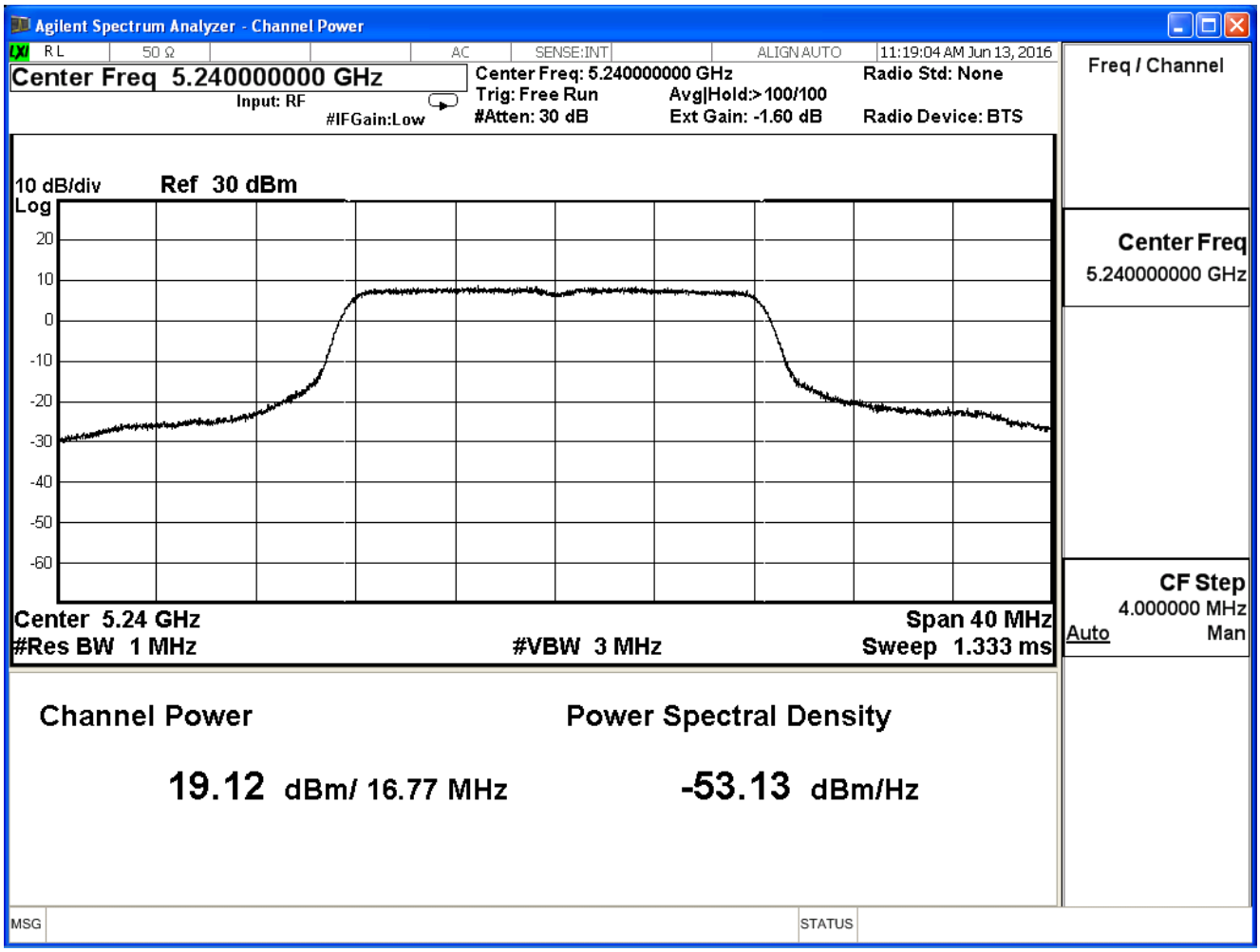
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

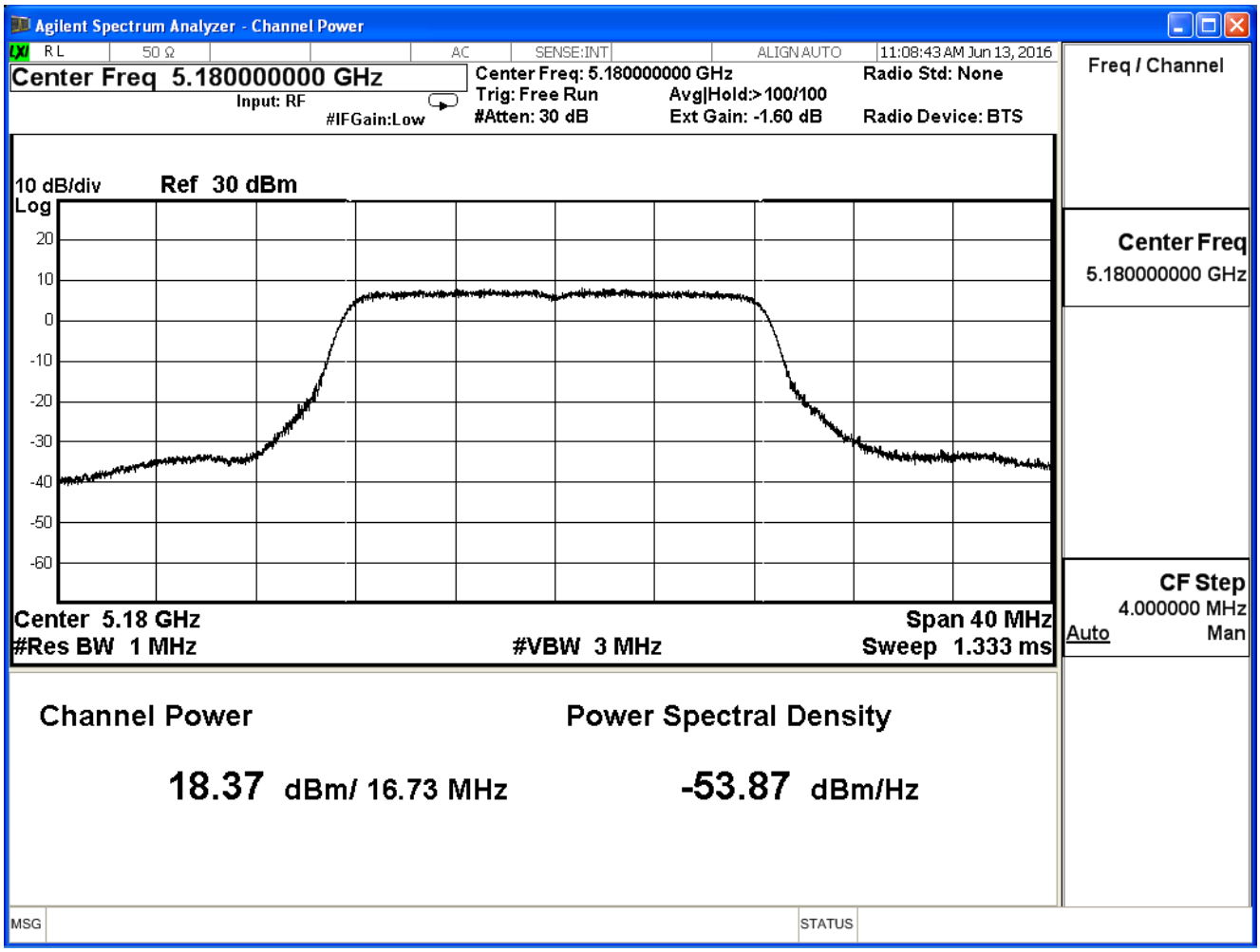
802.11a (ANT 3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.37	≤30
44	5220	19.12	≤30
48	5240	19.08	≤30

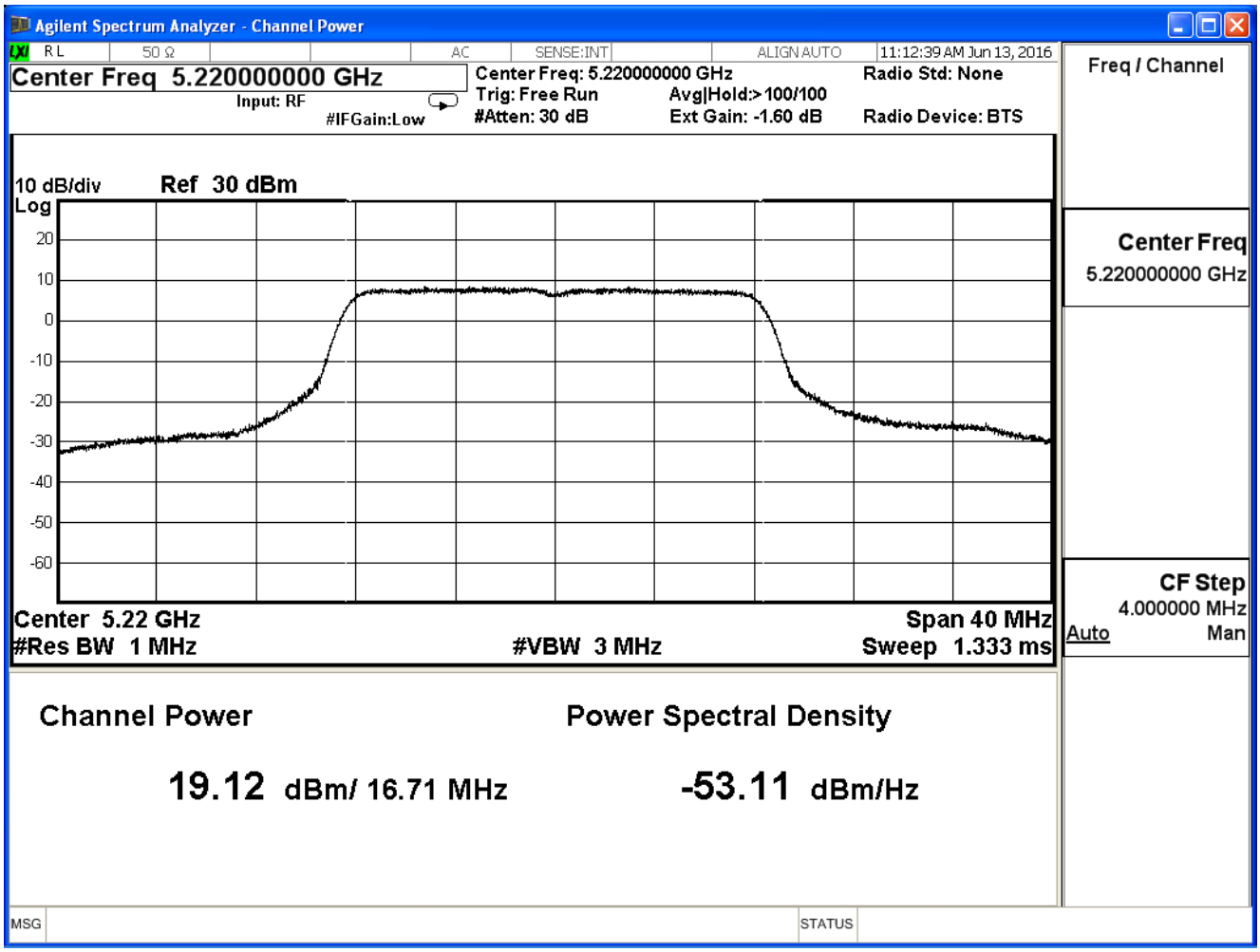
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	18.37	--	--	--	--	--	--	≤30dBm
44	5220	19.12	19.02	18.95	18.82	18.71	18.55	18.42	
48	5240	19.08	--	--	--	--	--	--	

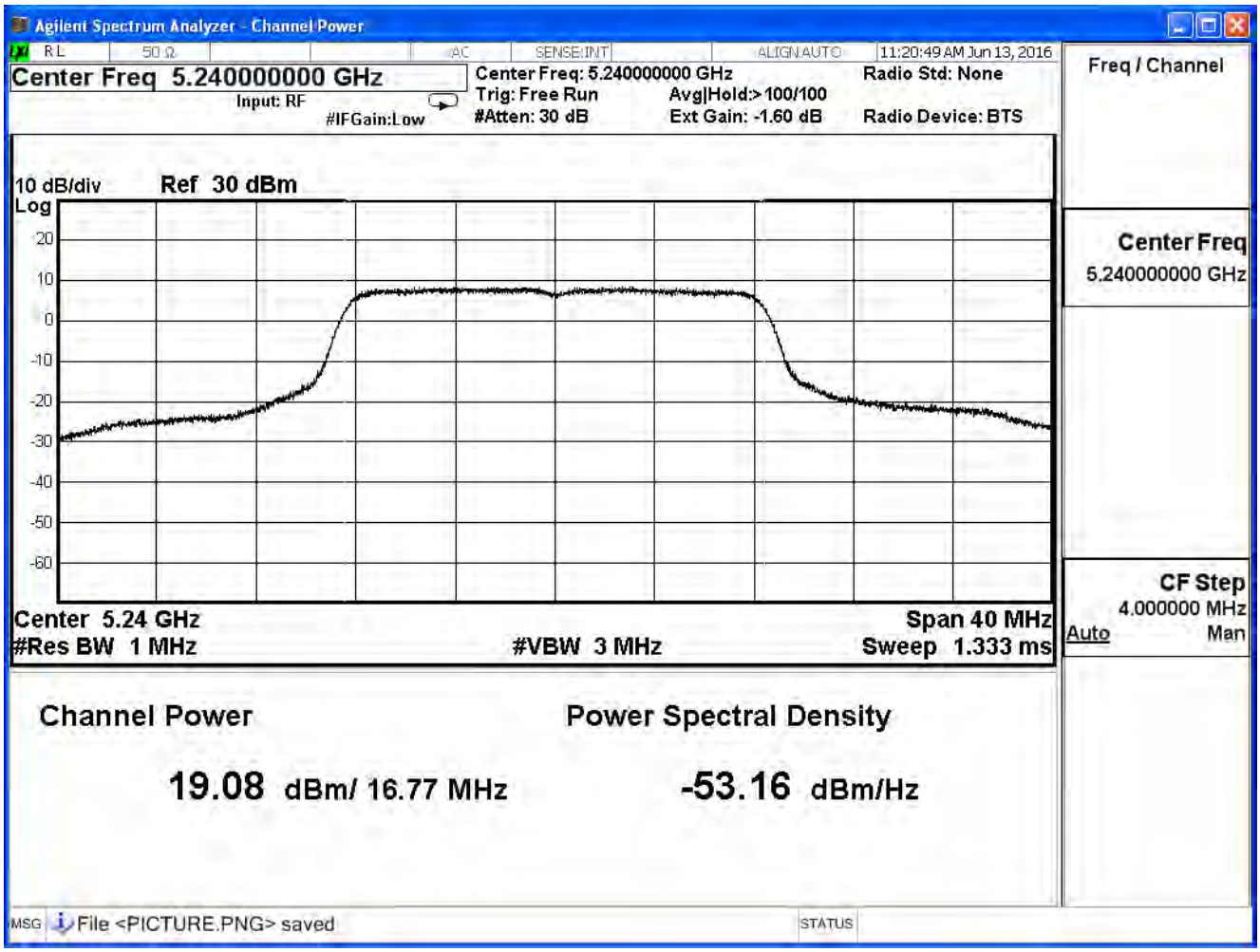
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

802.11a (ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.38	≤30
44	5220	25.18	≤30
48	5240	25.03	≤30

The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	24.38	--	--	--	--	--	--	≤30dBm
44	5220	25.18	25.11	25.03	24.91	24.83	24.73	24.60	
48	5240	25.03	--	--	--	--	--	--	

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(20MHz)(ANT 0)

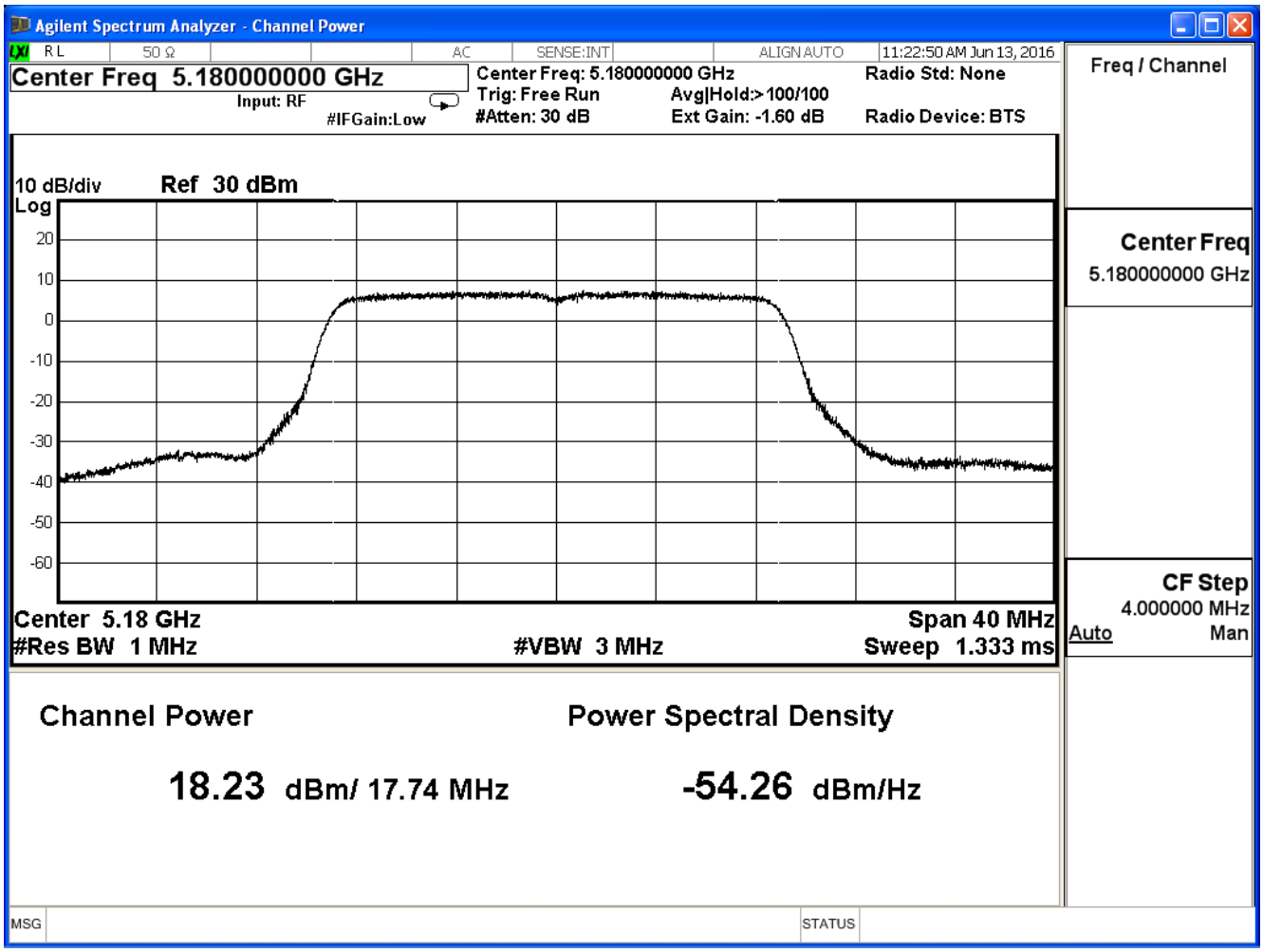
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.23	≤28.24
44	5220	19.13	≤28.24
48	5240	18.74	≤28.24

The worst emission of data rate is 26 Mbps..

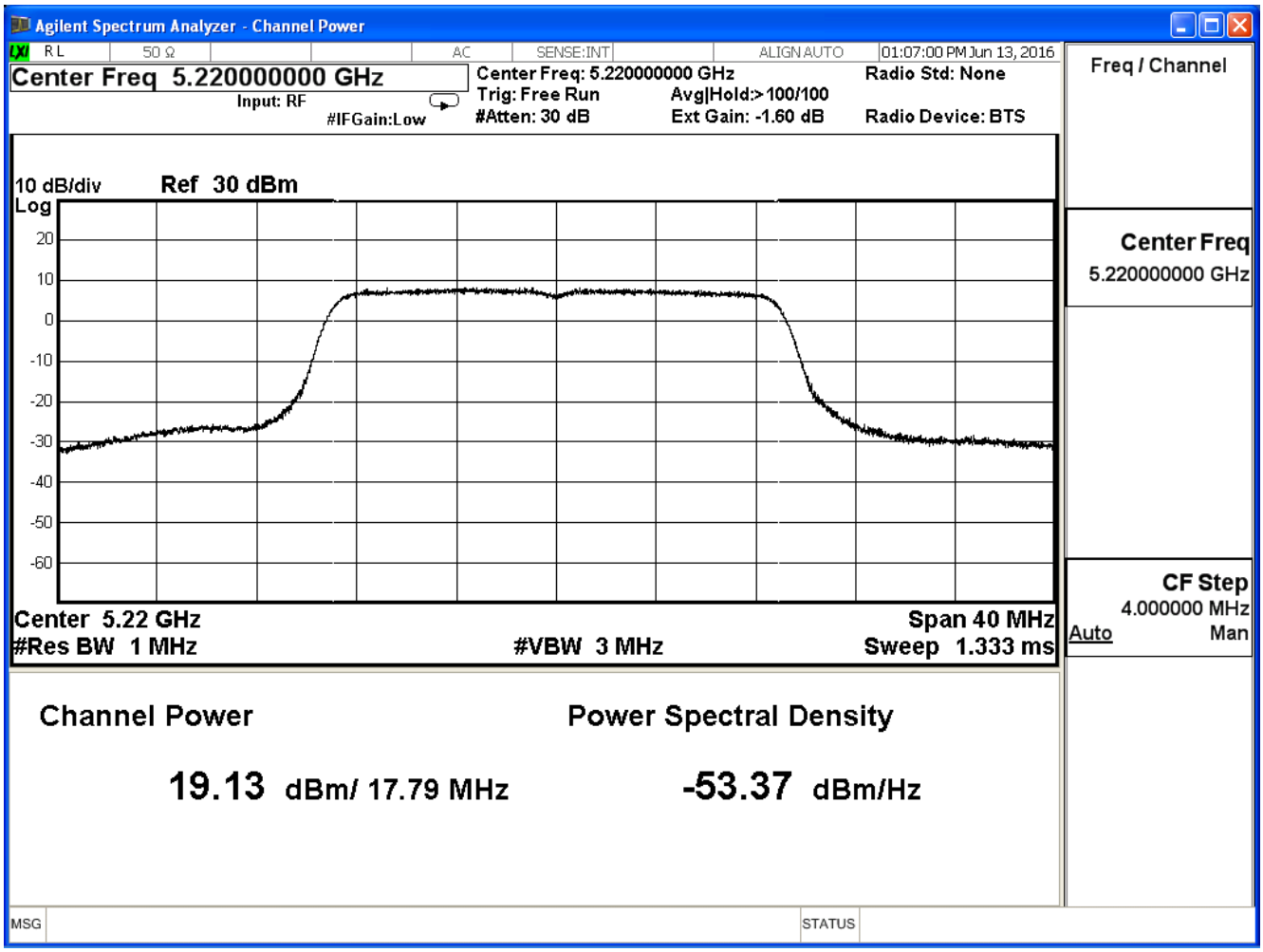
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
36	5180	18.23	--	--	--	--	--	--	--	≤28.24dBm
44	5220	19.13	19.00	18.93	18.82	18.77	18.65	18.50	18.45	
48	5240	18.74	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

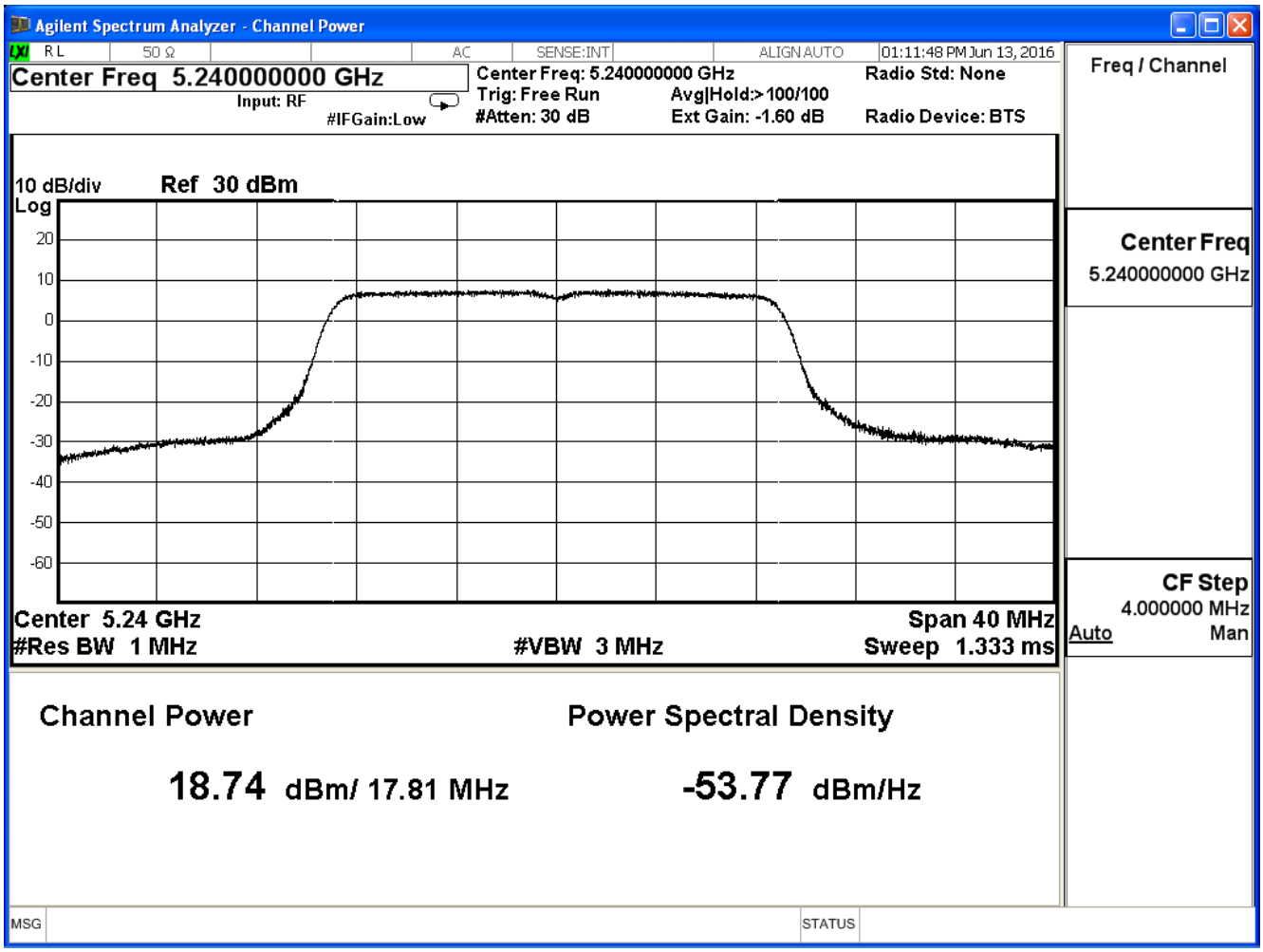
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(20MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.06	≤28.24
44	5220	19.00	≤28.24
48	5240	18.86	≤28.24

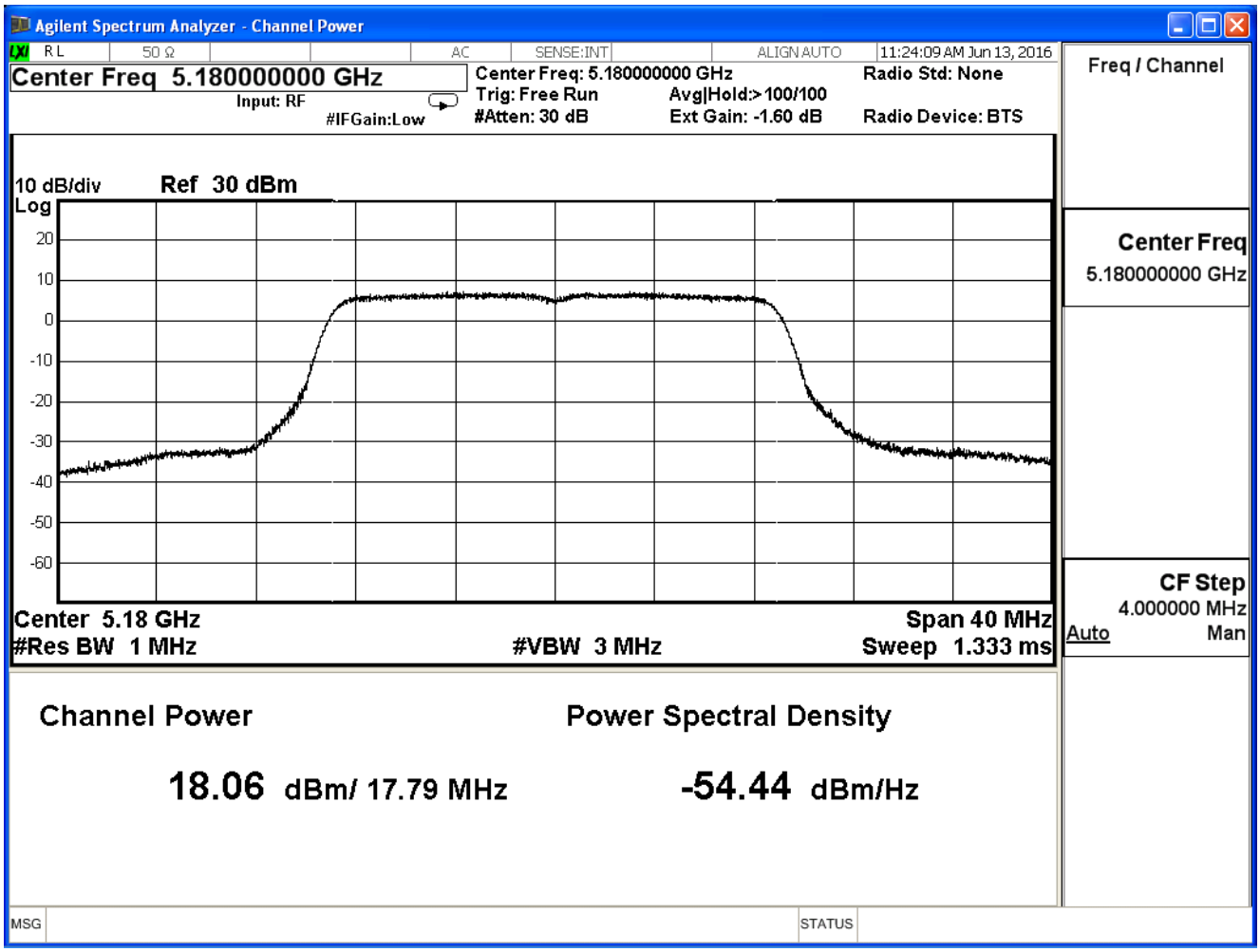
The worst emission of data rate is 26 Mbps

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
36	5180	18.06	--	--	--	--	--	--	--	≤28.24dBm
44	5220	19.00	18.92	18.84	18.68	18.52	18.42	18.29	18.11	
48	5240	18.86	--	--	--	--	--	--	--	

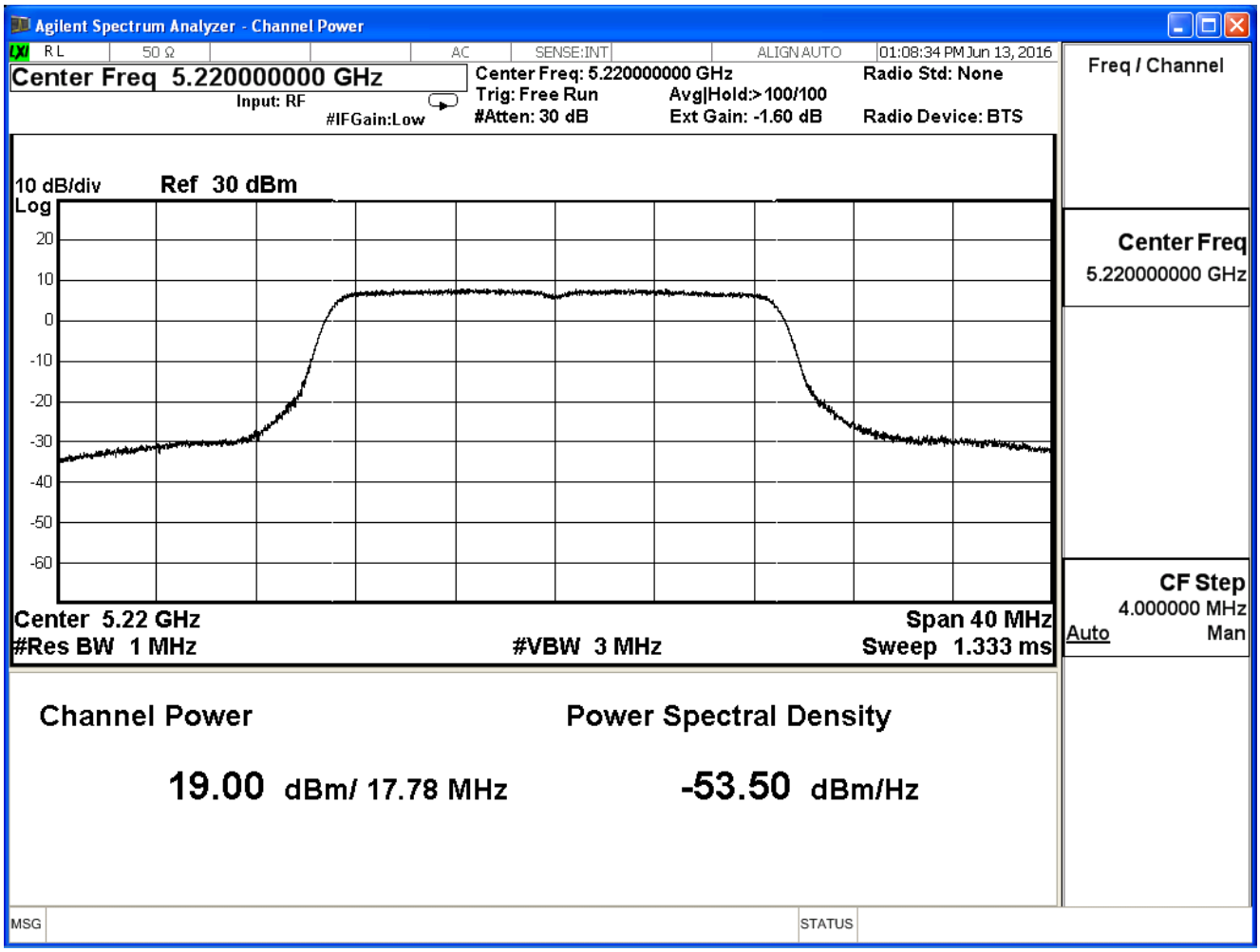
Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

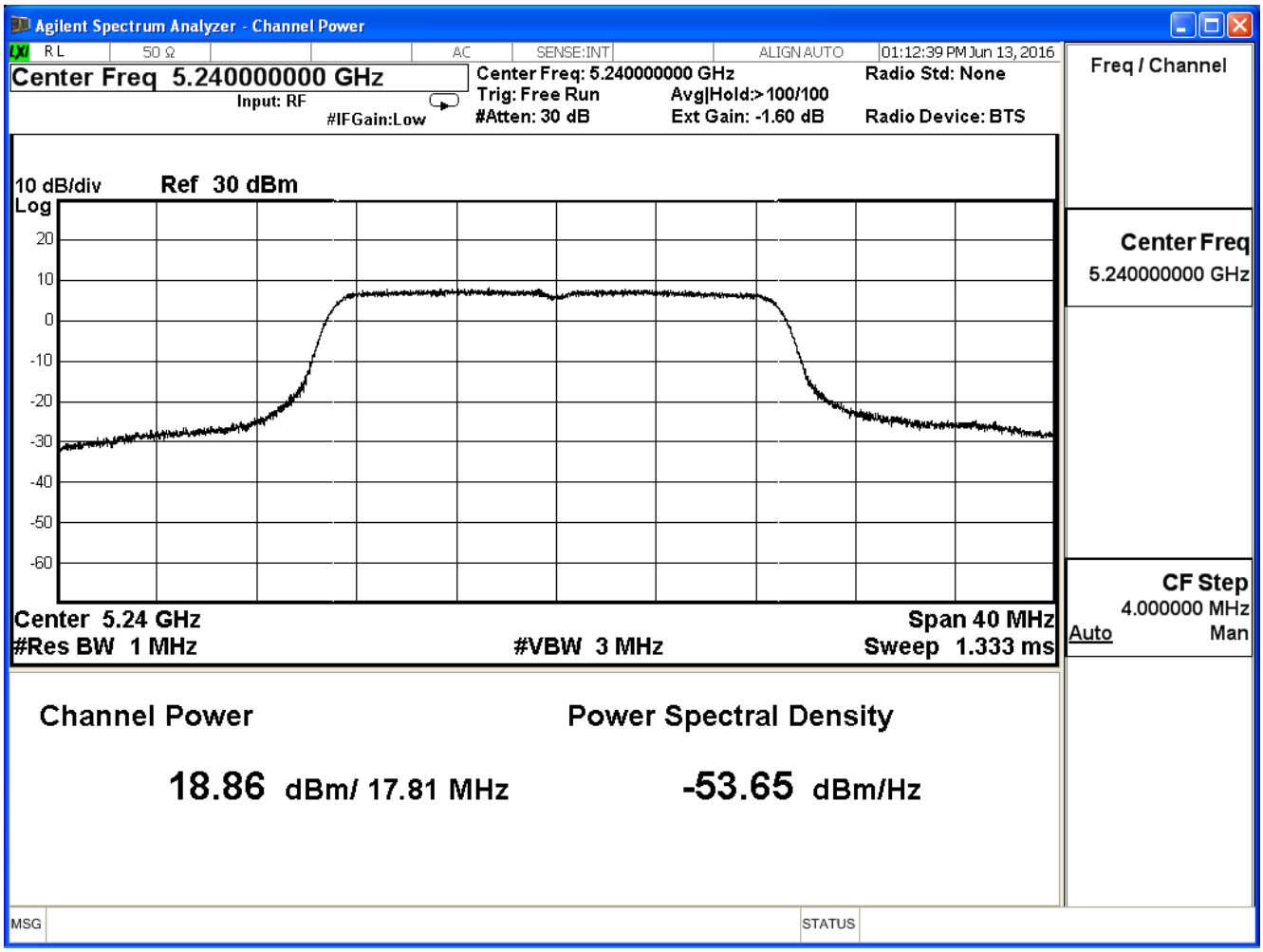
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(20MHz)(ANT 2)

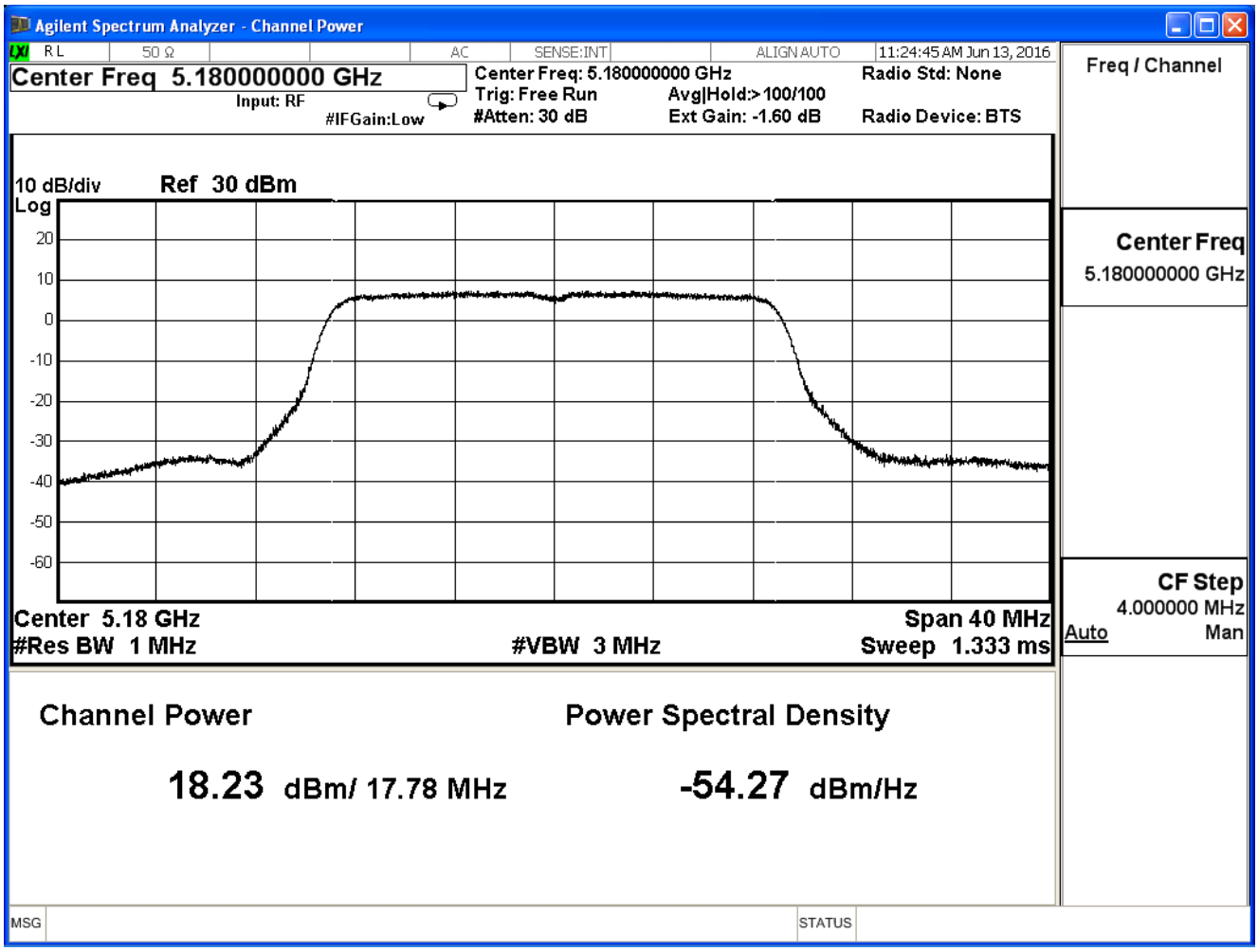
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.23	≤28.24
44	5220	19.12	≤28.24
48	5240	18.88	≤28.24

The worst emission of data rate is 26 Mbps.

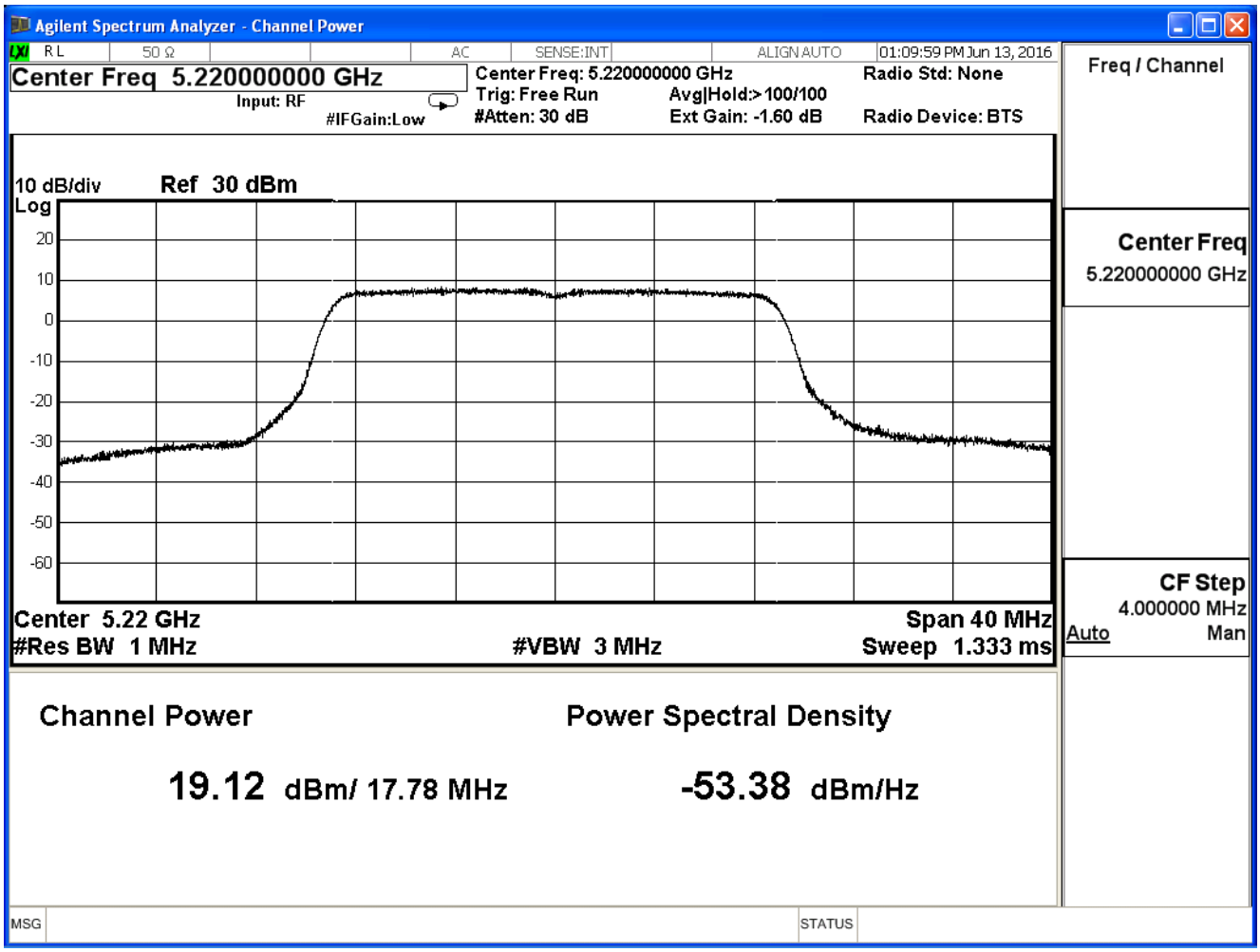
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
36	5180	18.23	--	--	--	--	--	--	--	≤28.24dBm
44	5220	19.12	19.03	18.93	18.81	18.68	18.55	18.43	18.32	
48	5240	18.88	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

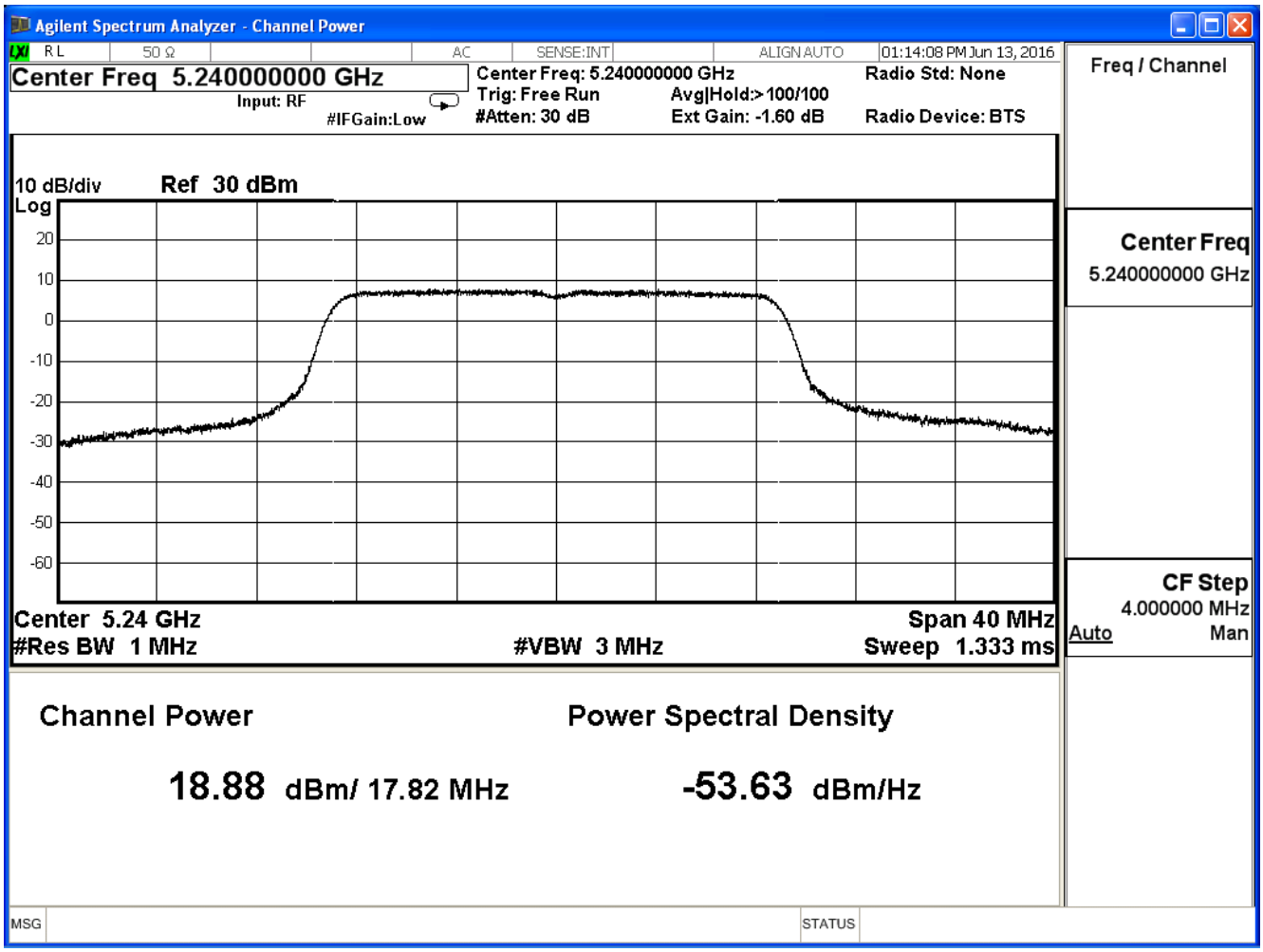
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(20MHz)(ANT 3)

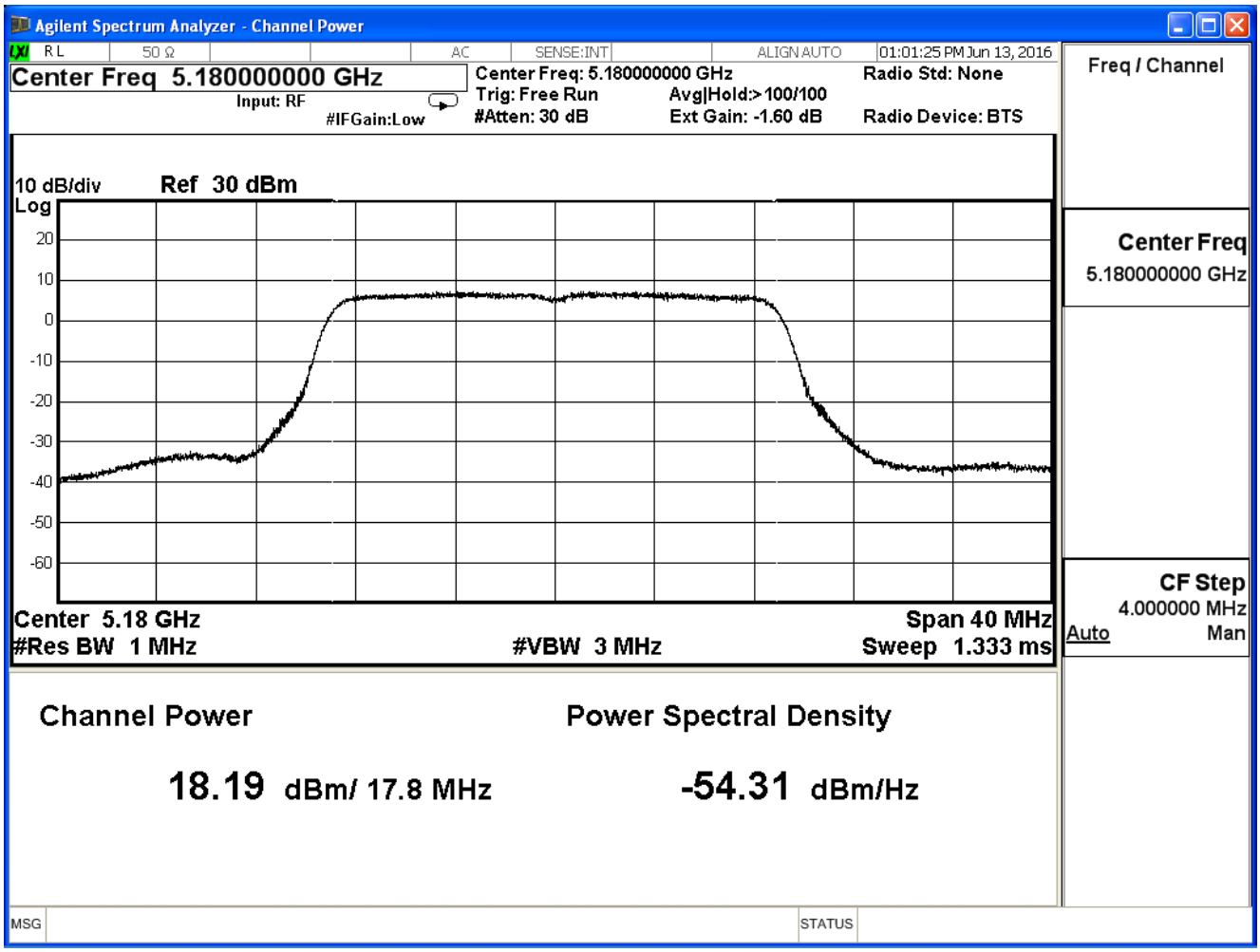
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	18.19	≤28.24
44	5220	19.12	≤28.24
48	5240	18.91	≤28.24

The worst emission of data rate is 26 Mbps.

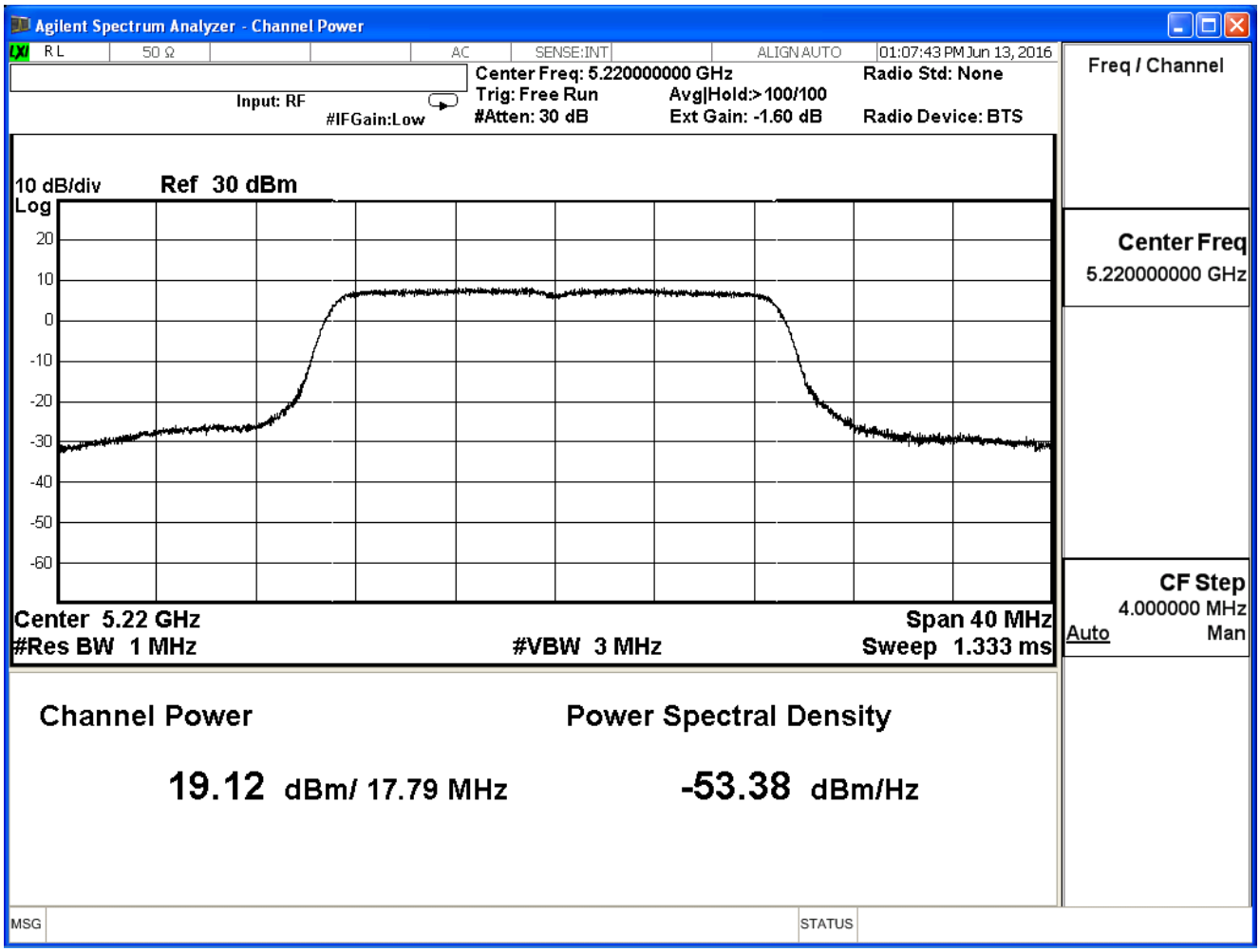
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
36	5180	18.19	--	--	--	--	--	--	--	≤28.24dBm
44	5220	19.12	19.00	18.93	18.79	18.63	18.49	18.33	18.21	
48	5240	18.91	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

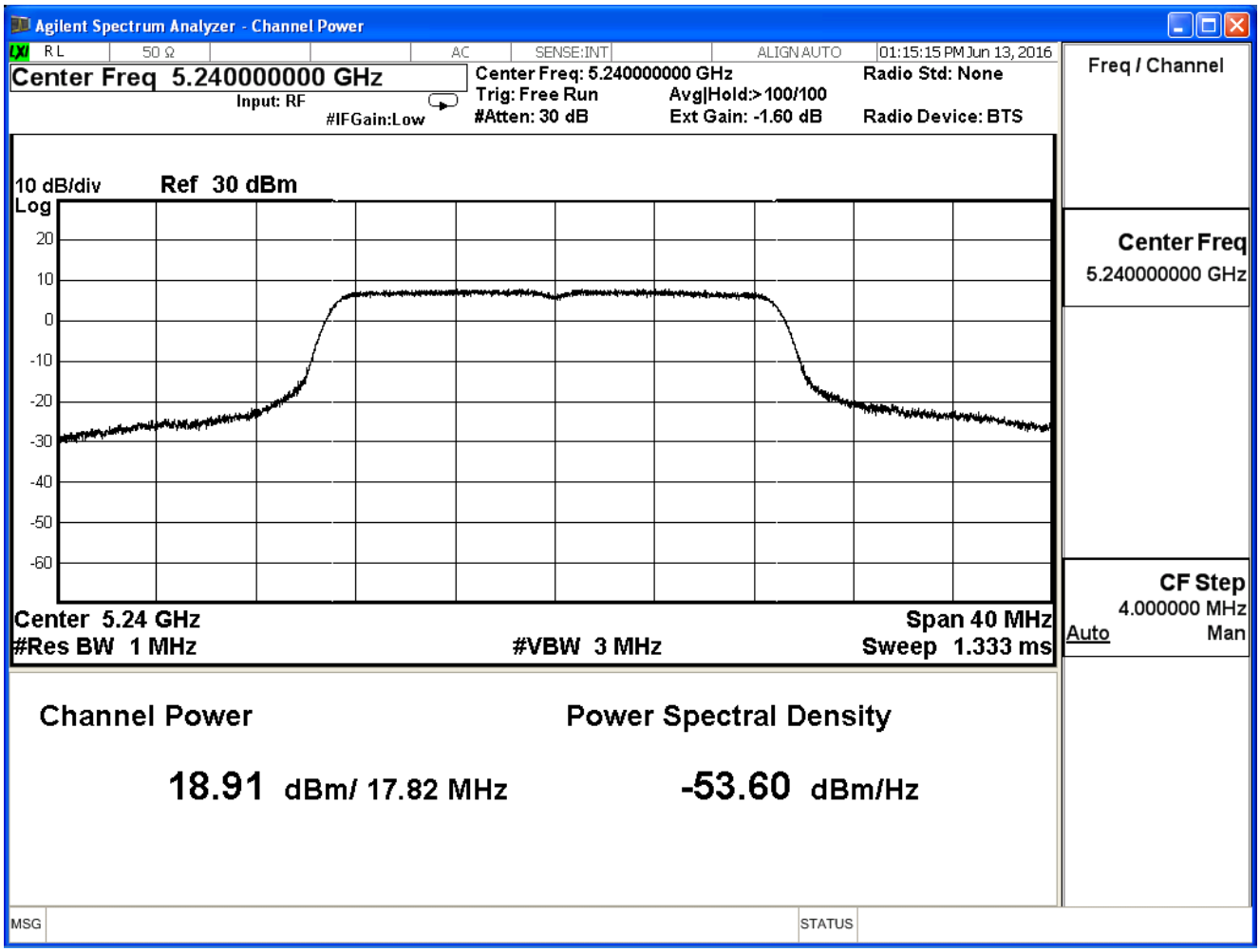
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(20MHz)(ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.20	≤28.24
44	5220	25.11	≤28.24
48	5240	24.87	≤28.24

The worst emission of data rate is 26 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
36	5180	24.20	--	--	--	--	--	--	--	≤28.24dBm
44	5220	25.11	25.01	24.93	24.80	24.67	24.55	24.41	24.29	
48	5240	24.87	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	14.25	≤28.24
46	5230	20.31	≤28.24

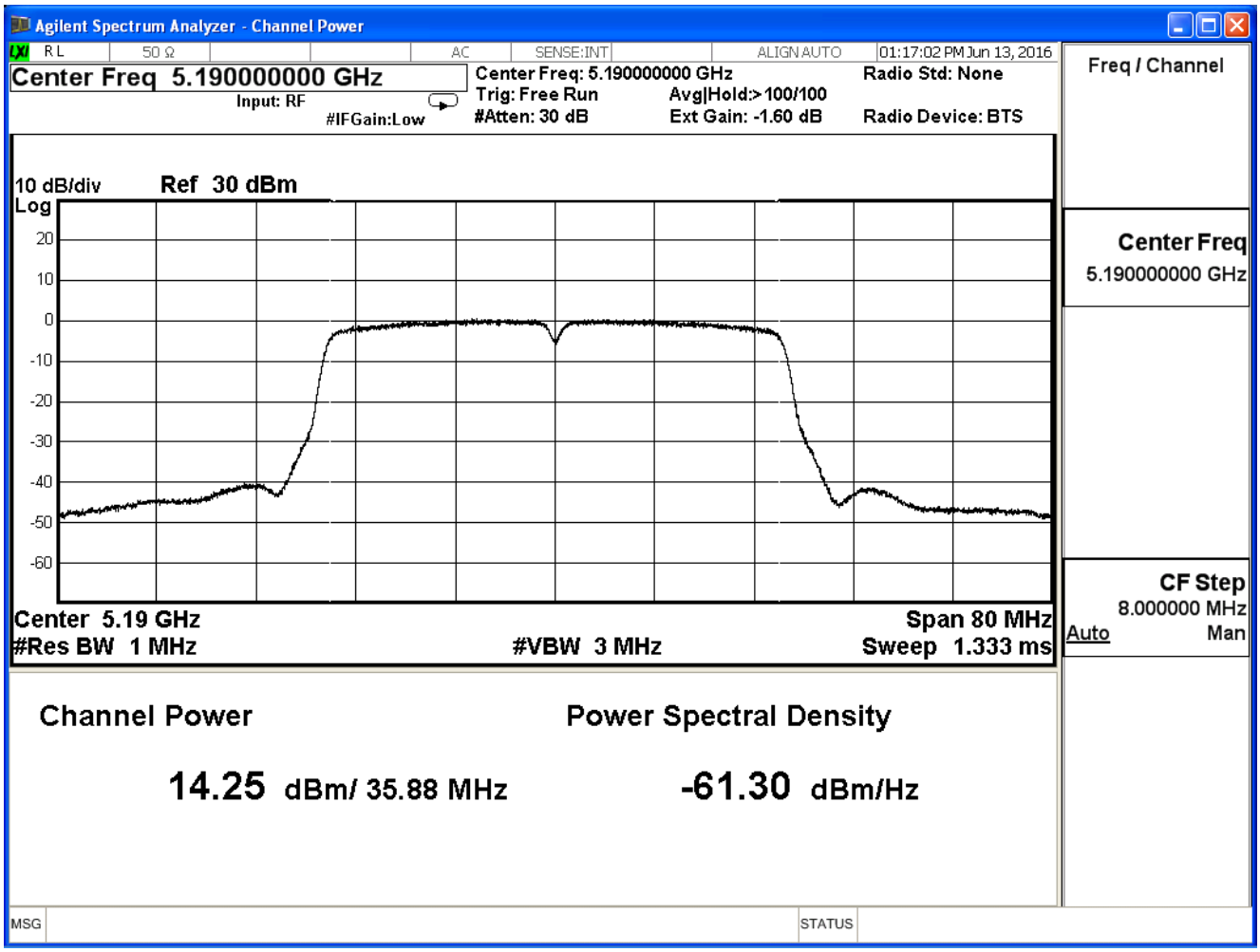
The worst emission of data rate is 54 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
38	5190	14.25	--	--	--	--	--	--	--	≤28.24dBm
46	5230	20.31	20.21	20.11	20.01	19.83	19.77	19.69	19.50	

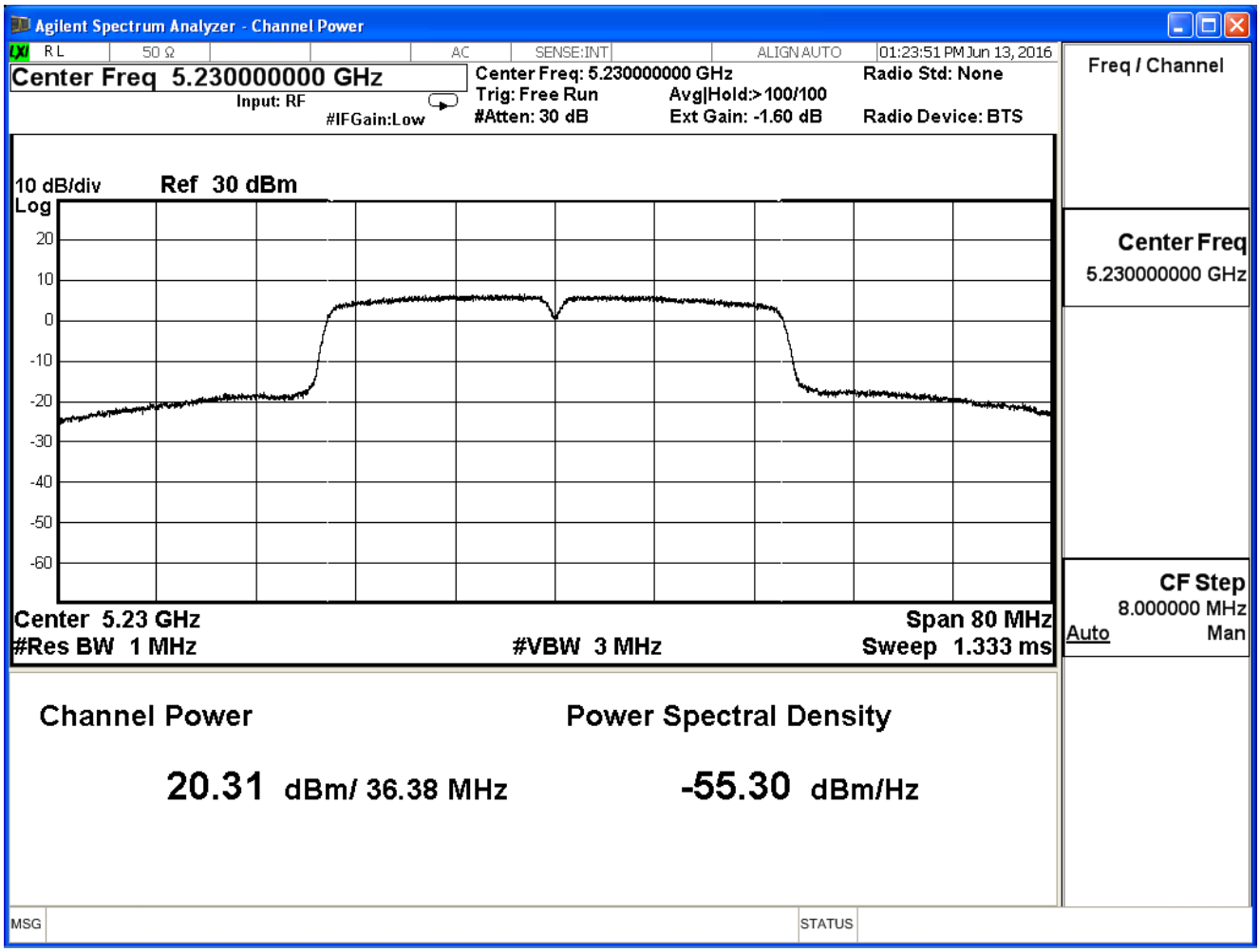
Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 1)

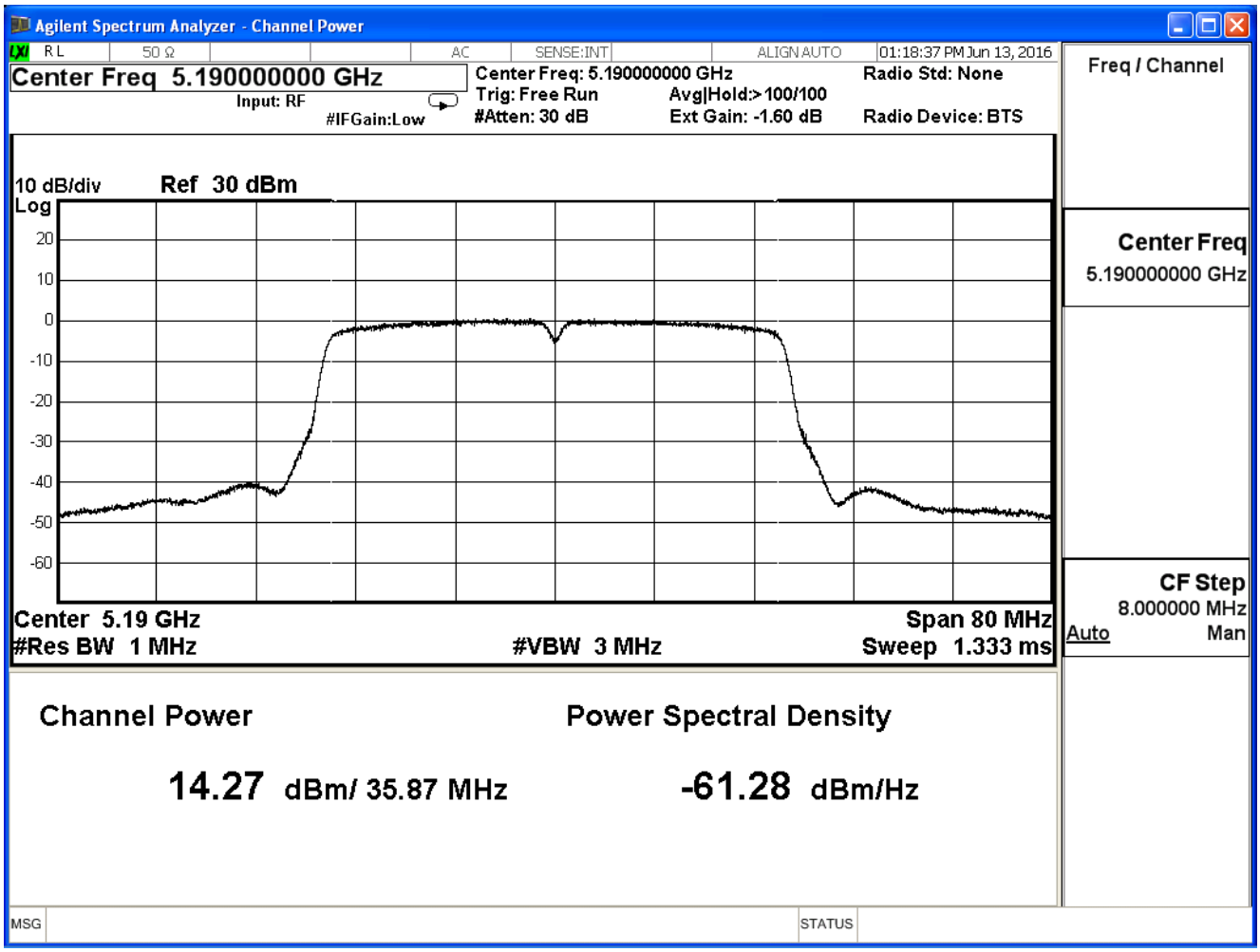
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	14.27	≤28.24
46	5230	20.32	≤28.24

The worst emission of data rate is 54 Mbps

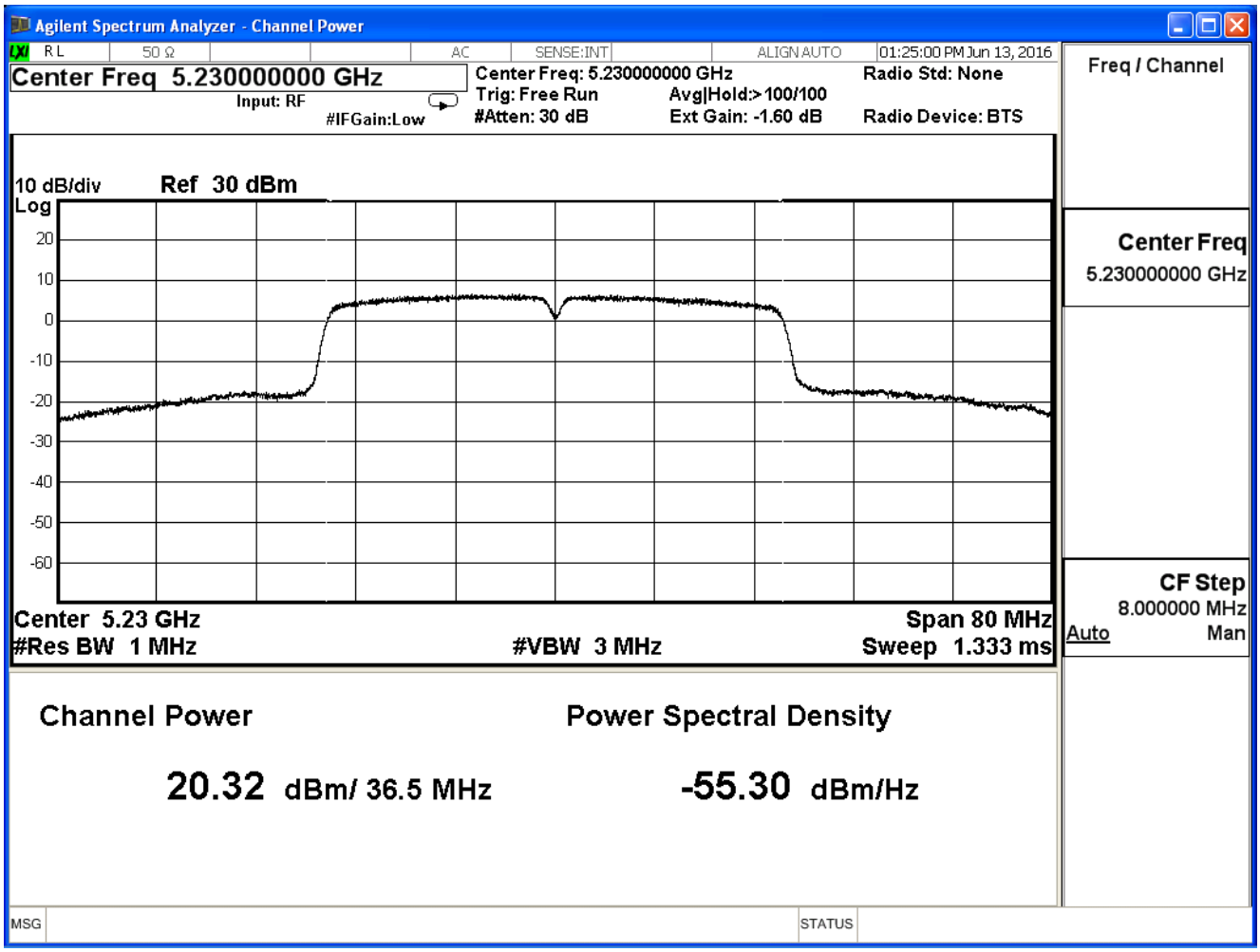
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
38	5190	14.27	--	--	--	--	--	--	--	≤28.24dBm
46	5230	20.32	20.10	19.93	19.84	19.67	19.34	19.20	19.02	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 2)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	14.34	≤28.24
46	5230	20.45	≤28.24

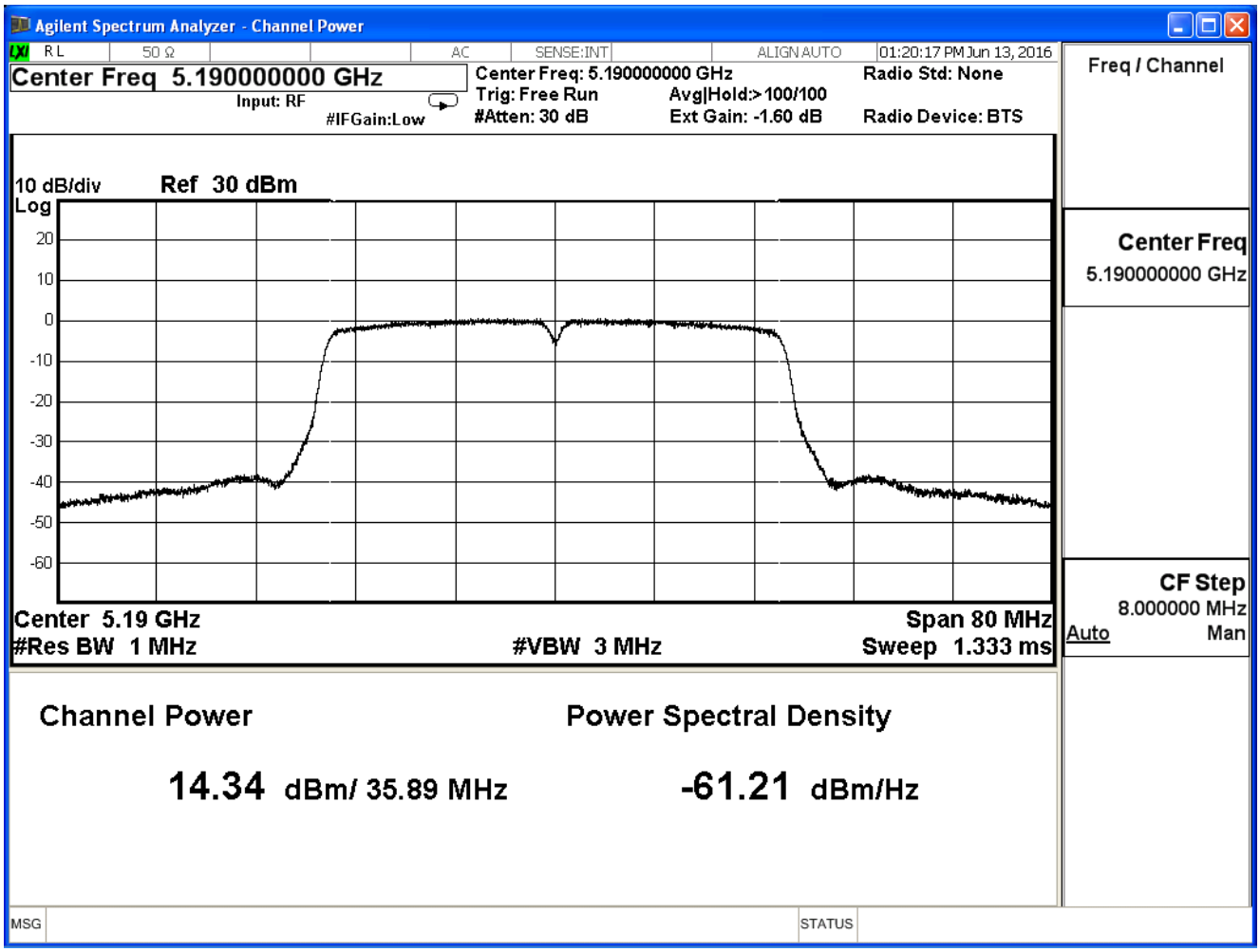
The worst emission of data rate is 54 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
38	5190	14.34	--	--	--	--	--	--	--	≤28.24 dBm
46	5230	20.45	20.21	20.03	19.92	19.80	19.66	19.48	19.22	

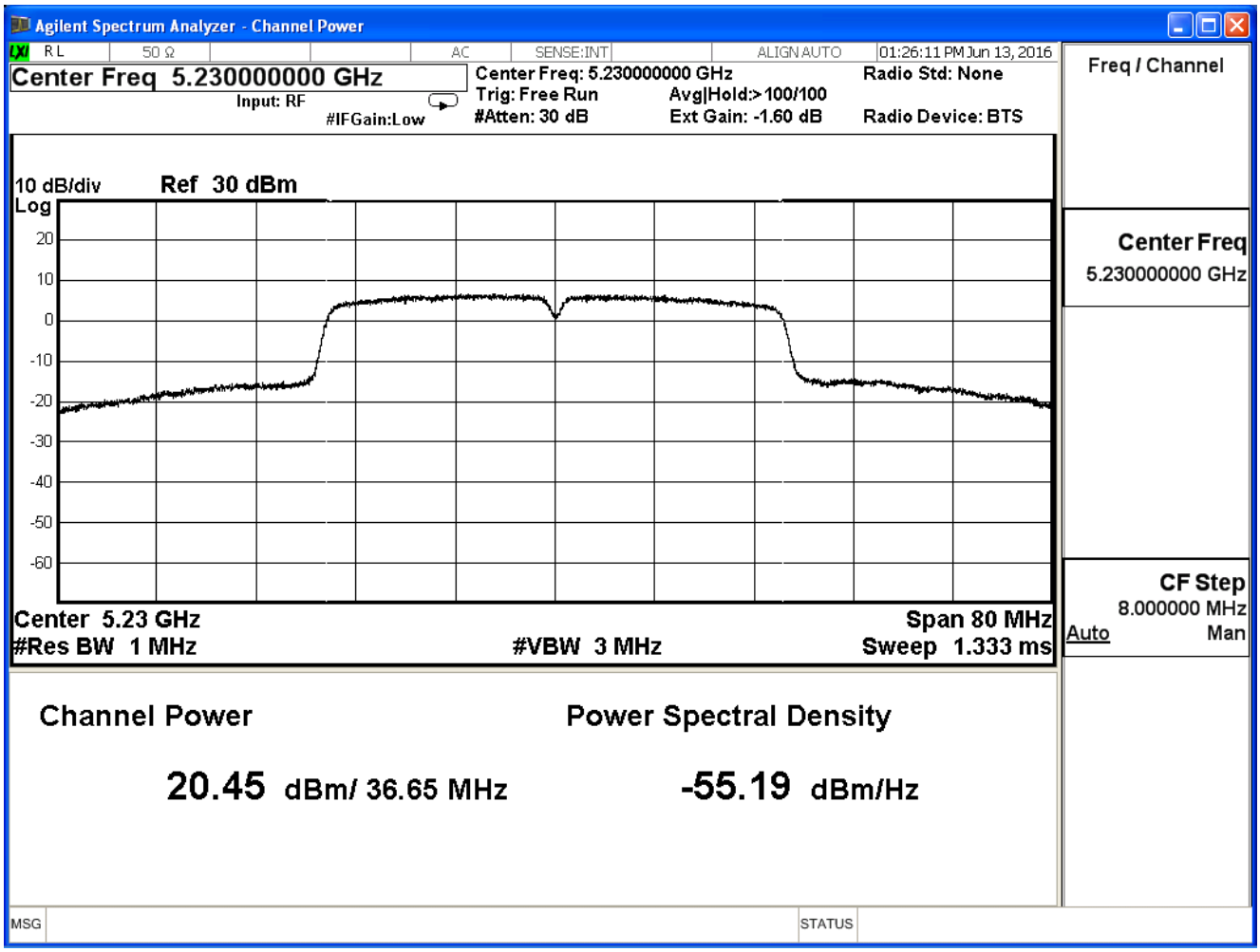
Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	14.40	≤28.24
46	5230	20.47	≤28.24

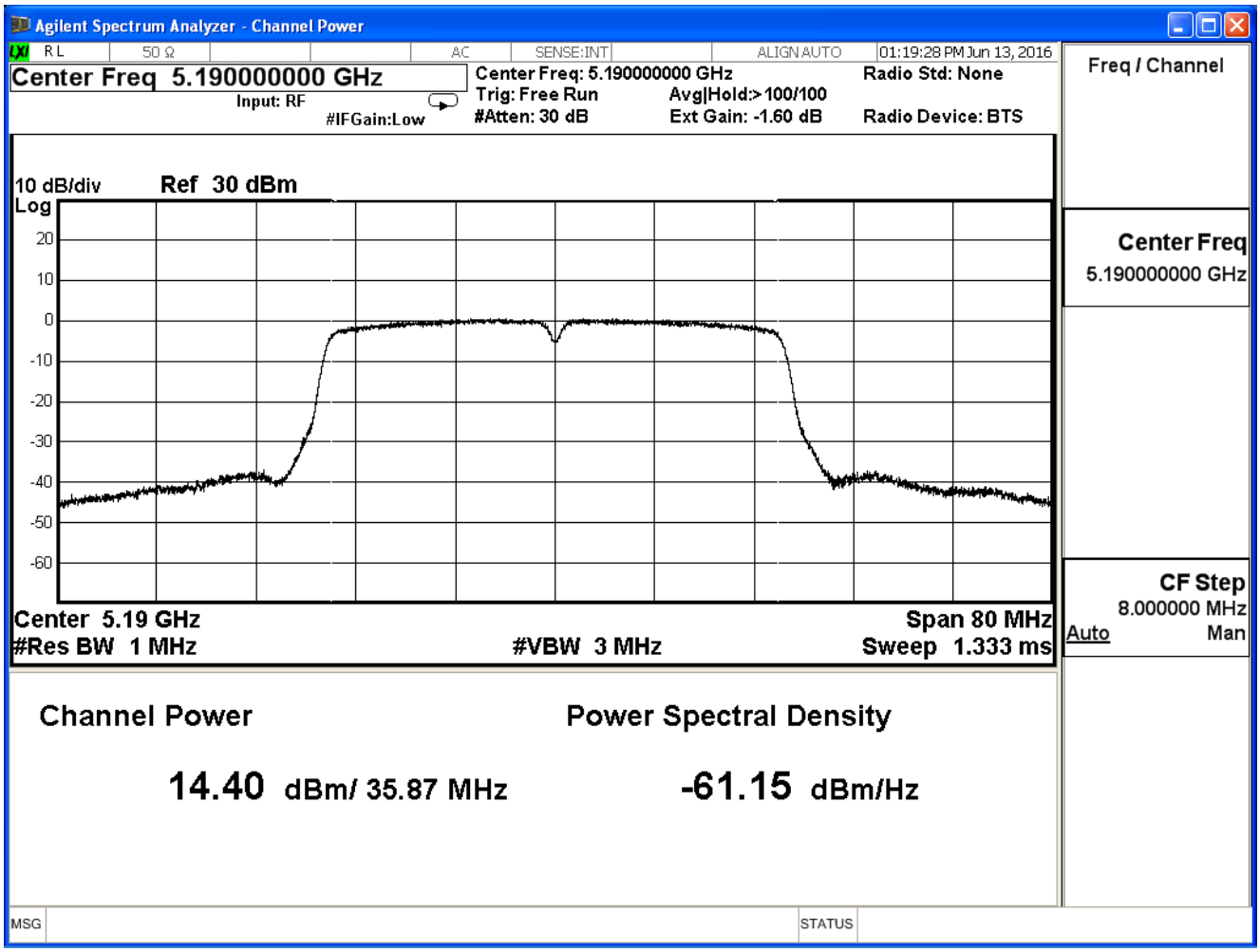
The worst emission of data rate is 54 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
38	5190	14.40	--	--	--	--	--	--	--	≤28.24 dBm
46	5230	20.47	20.20	20.02	19.90	19.72	19.55	19.34	19.10	

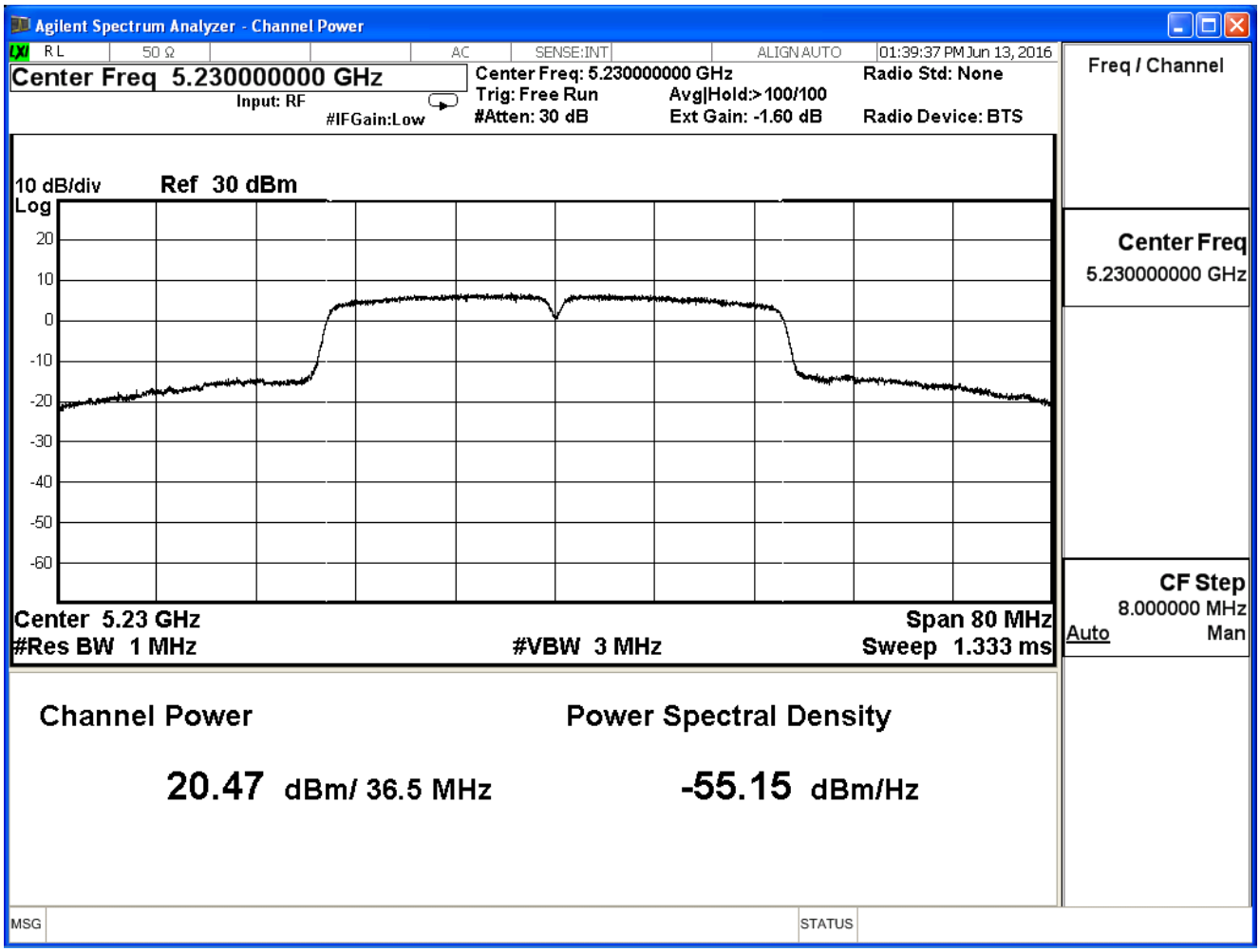
Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	20.34	≤28.24
46	5230	26.41	≤28.24

The worst emission of data rate is 54 Mbps

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel	Frequency	Data Rate								
No	(MHz)	54	108	162	216	324	432	486	540	
38	5190	20.34	--	--	--	--	--	--	--	≤28.24dBm
46	5230	26.41	23.22	23.04	22.92	22.77	22.62	22.42	22.17	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	13.54	≤28.24

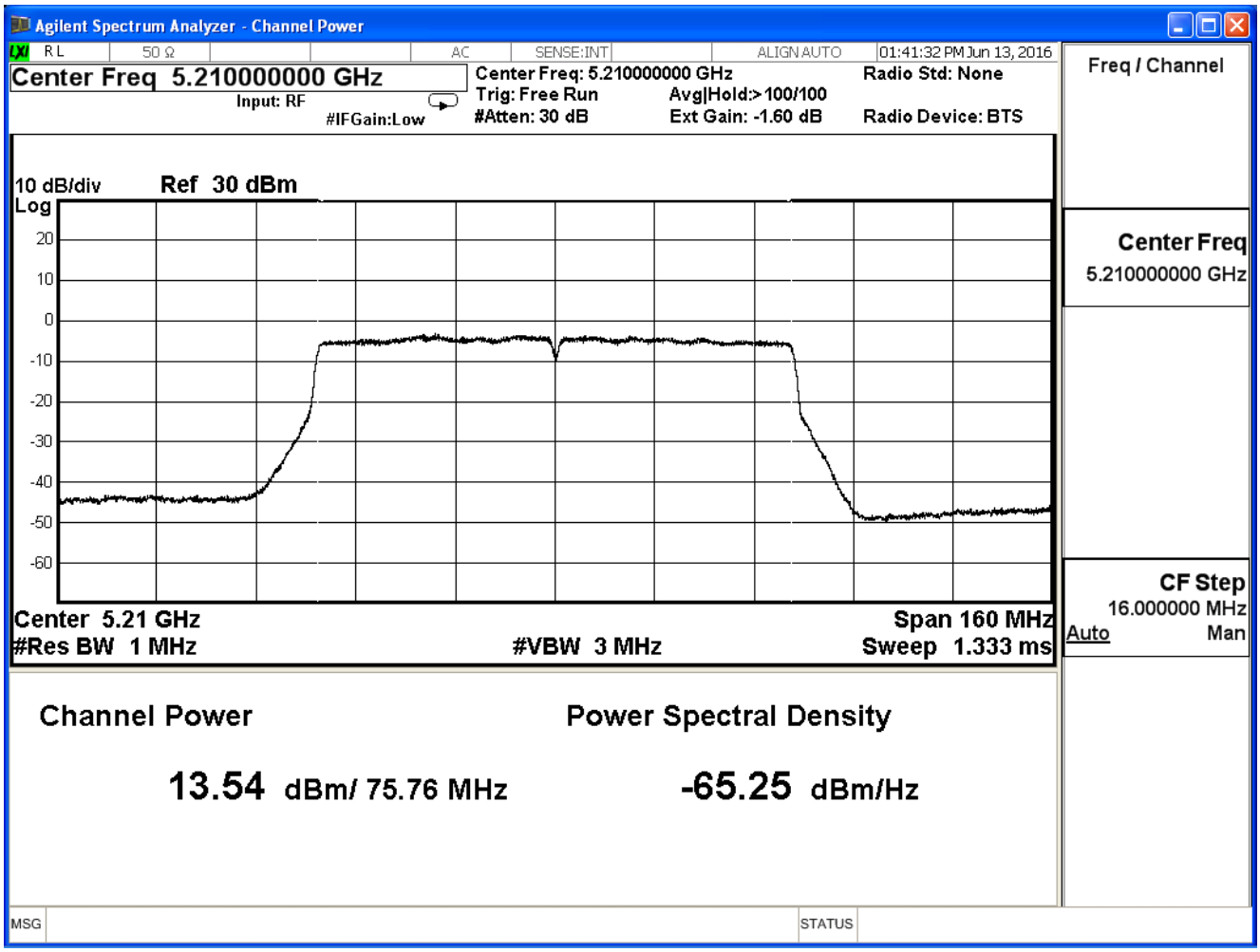
The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	702	936	1053	1170	1404	1560	
42	5210	13.54	13.30	13.11	13.00	12.87	12.66	12.51	12.38	12.20	12.08	≤28.24dBm

Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 42



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	13.61	≤28.24

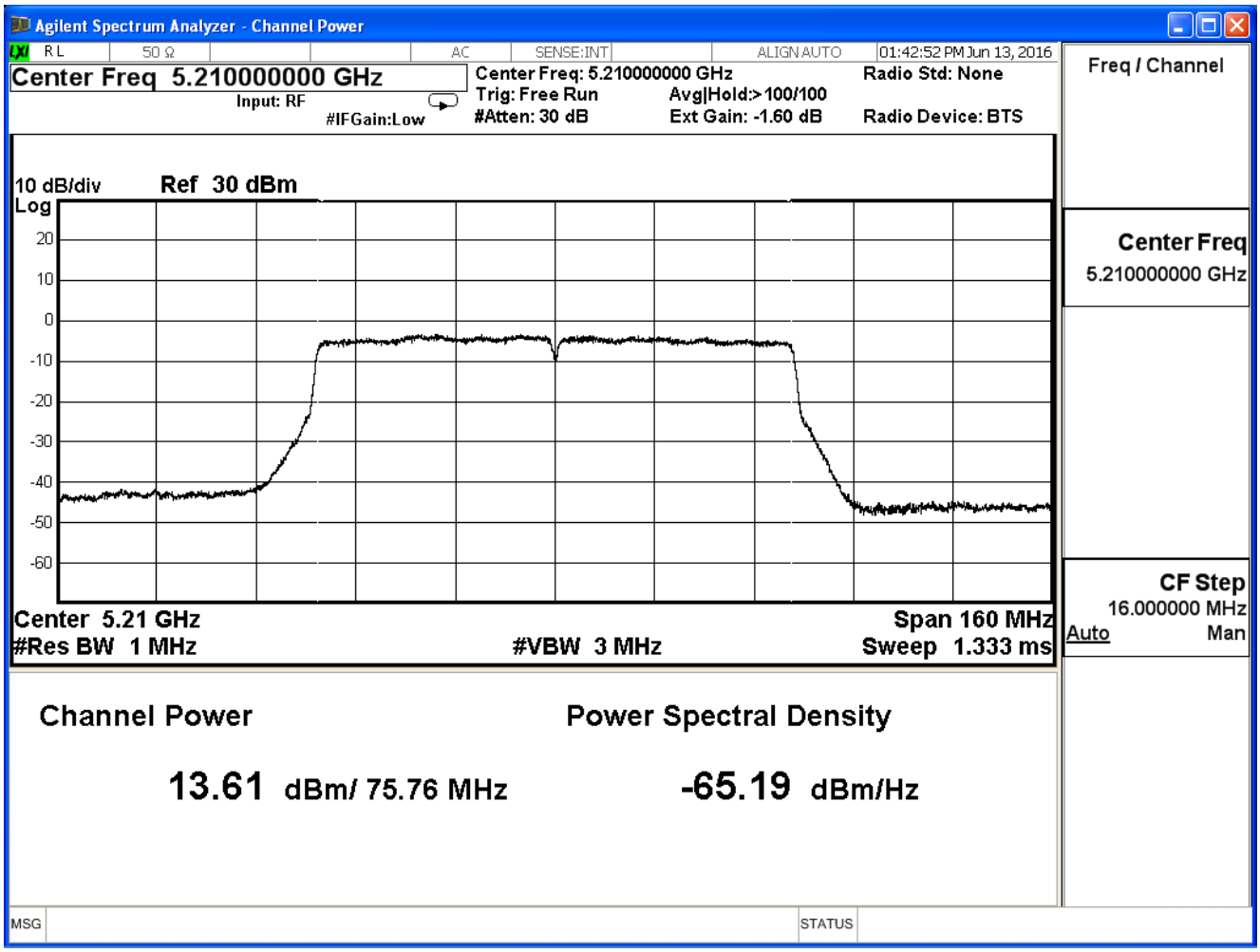
The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	702	936	1053	1170	1404	1560	≤28.24dBm
42	5210	13.61	13.44	13.20	13.02	12.90	12.75	12.60	12.48	12.24	12.03	

Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 42



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 2)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	13.84	≤28.24

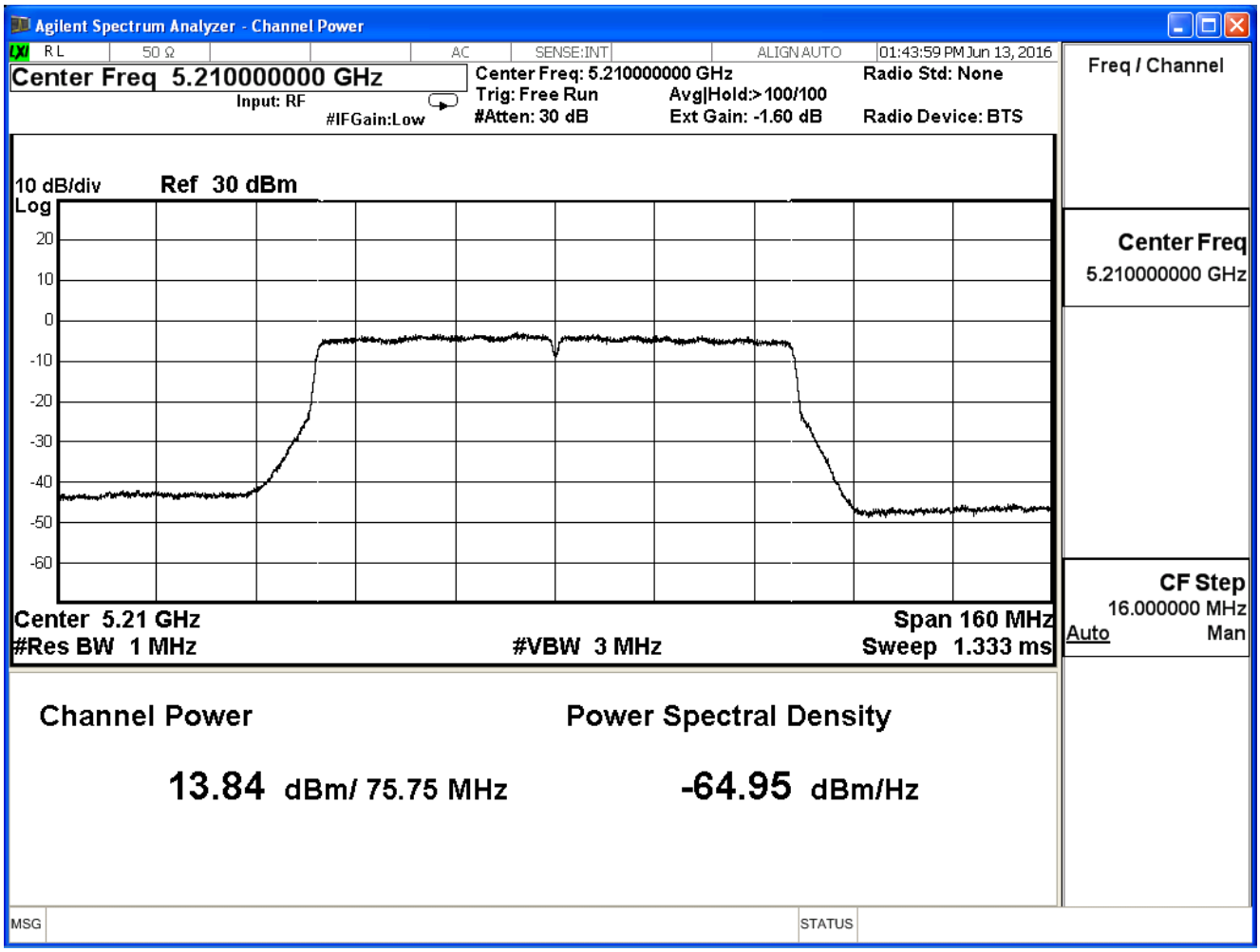
The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	702	936	1053	1170	1404	1560	≤28.24dBm
42	5210	13.84	13.68	13.43	13.28	13.15	13.00	12.93	12.75	12.60	12.41	

Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 42



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	13.77	≤28.24

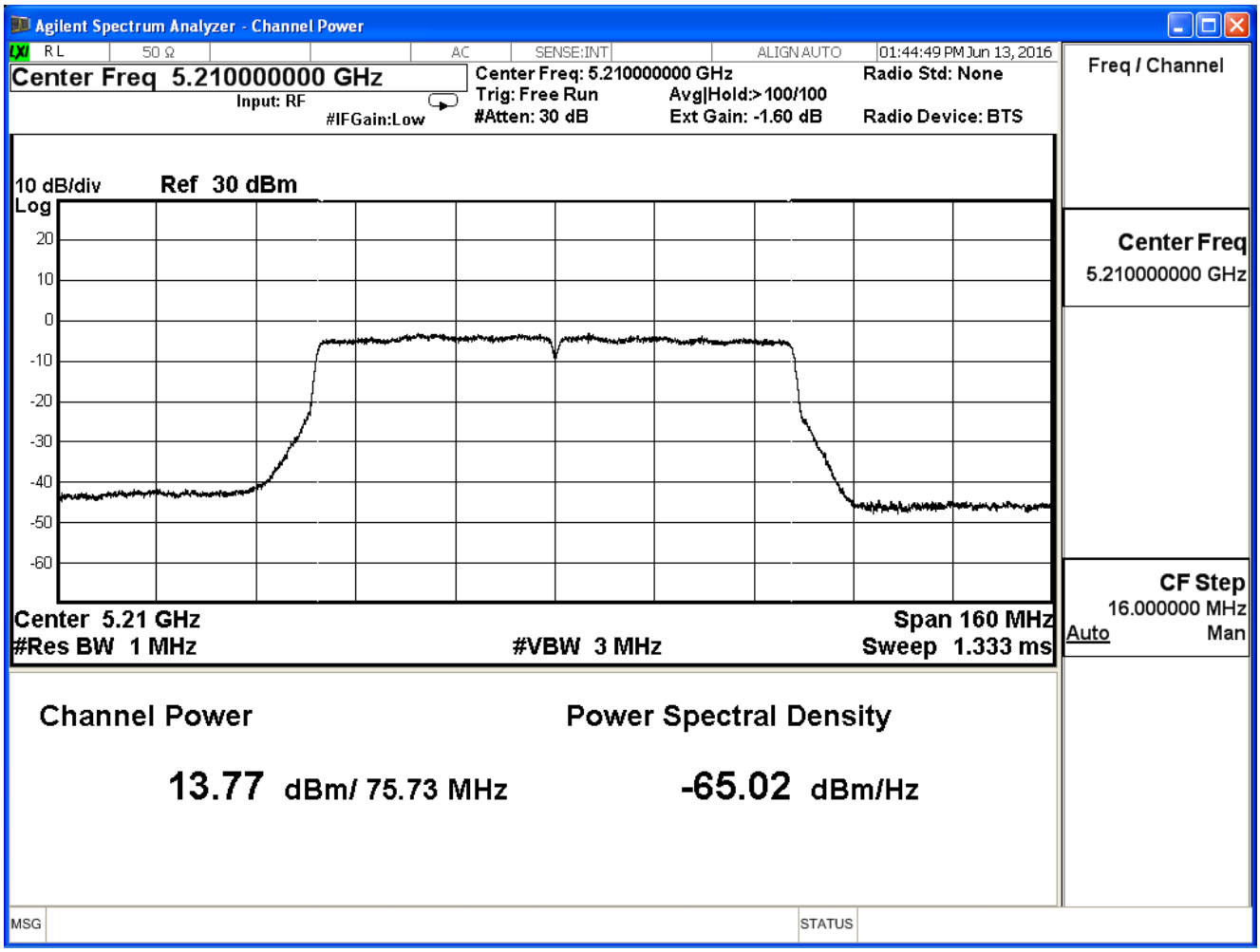
The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	702	936	1053	1170	1404	1560	
42	5210	13.77	13.55	13.43	13.20	13.04	12.91	12.72	12.55	12.34	12.09	≤28.24dBm

Array Gain: = 7.76 dBi

Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 42



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/13	Test Site	SR7

IEEE 802.11ac(80MHz)(ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	19.71	≤28.24

The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	702	936	1053	1170	1404	1560	
42	5210	19.71	19.52	19.32	19.15	19.01	18.85	18.71	18.56	18.37	18.18	≤28.24dBm

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

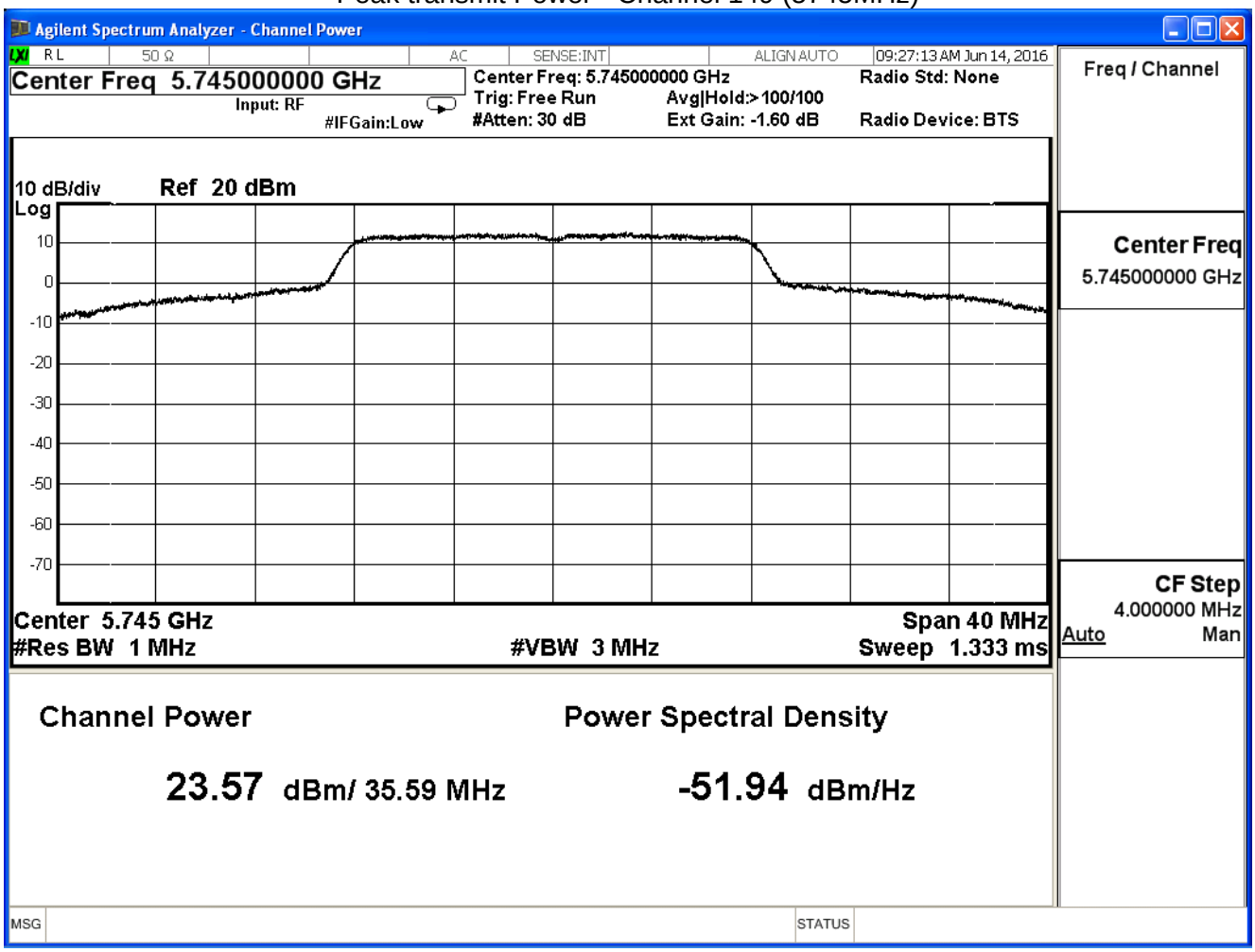
IEEE 802.11a (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	23.57	≤30
157	5785	23.10	≤30
165	5825	22.72	≤30

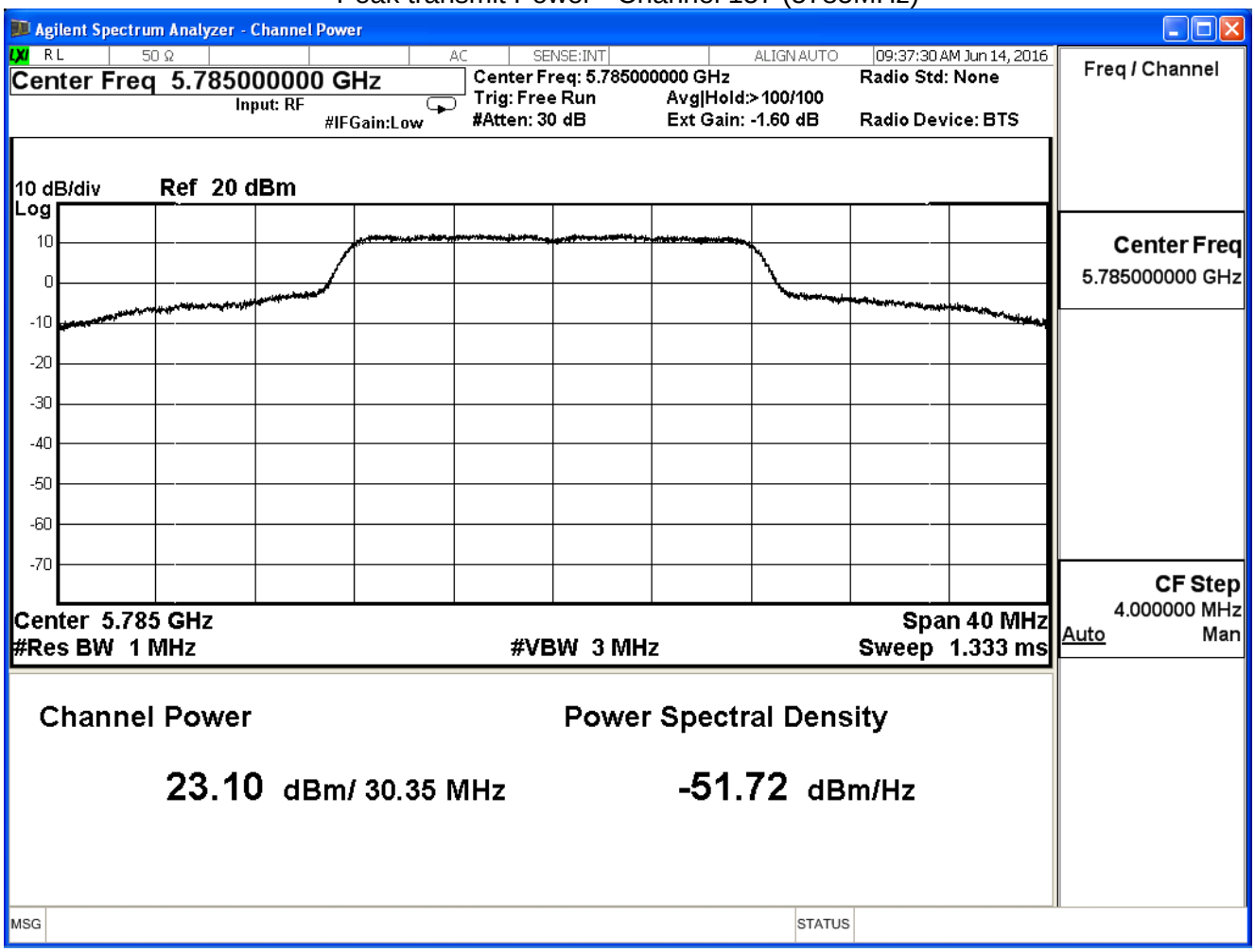
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	23.57	--	--	--	--	--	--	≤30dBm
157	5785	23.10	22.98	22.90	22.82	22.75	22.66	22.50	
165	5825	22.72	--	--	--	--	--	--	

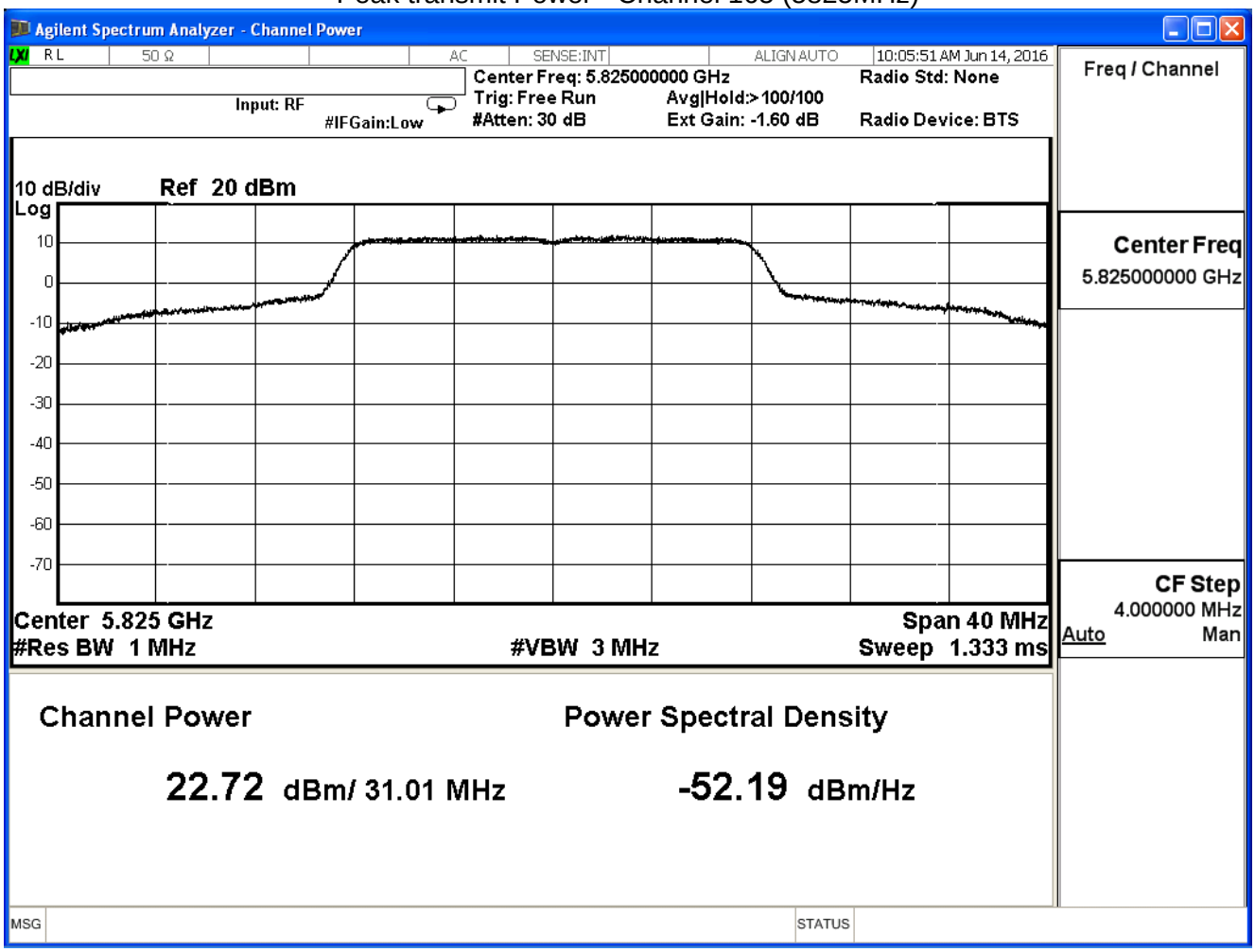
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

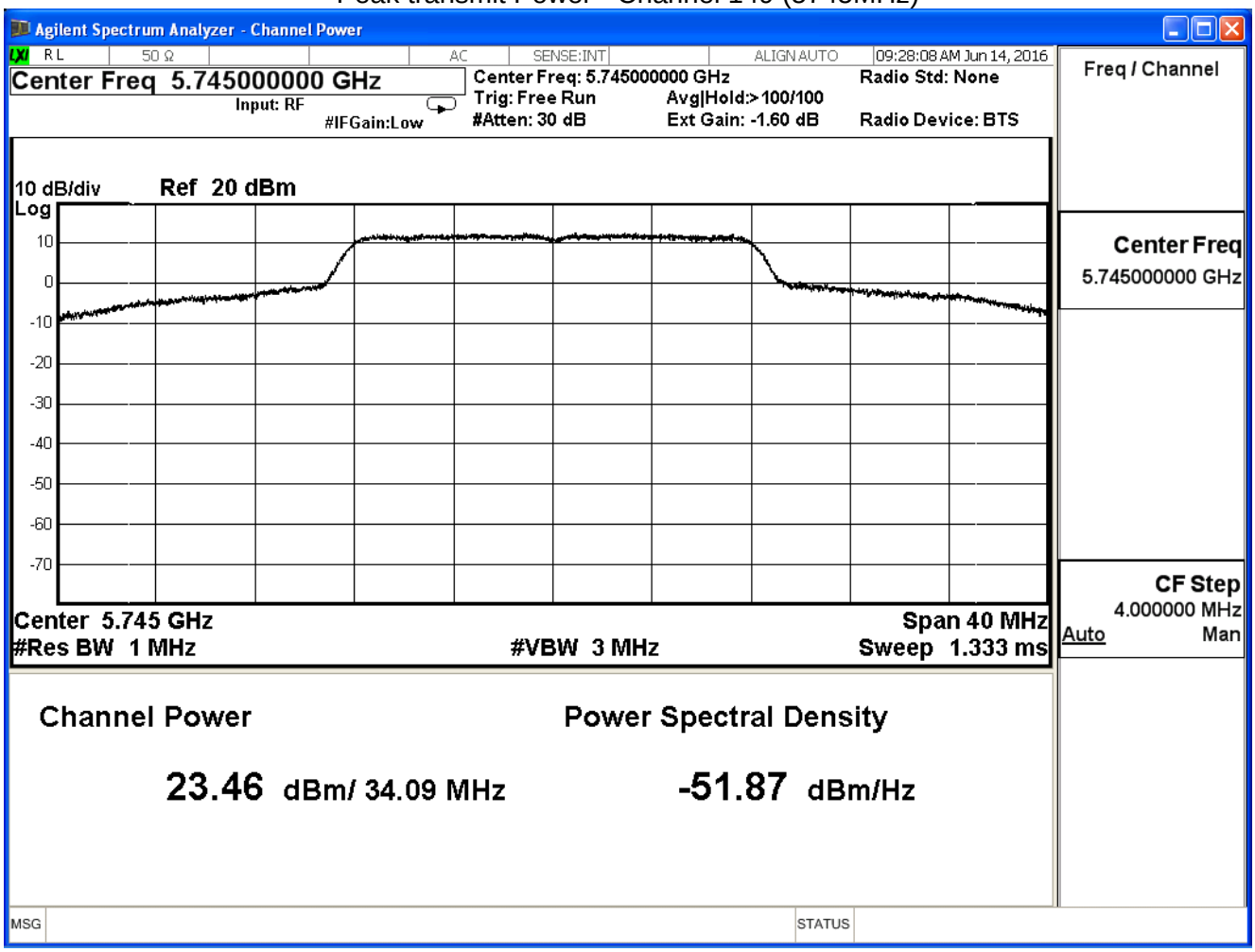
IEEE 802.11a (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	23.46	≤30
157	5785	23.13	≤30
165	5825	22.64	≤30

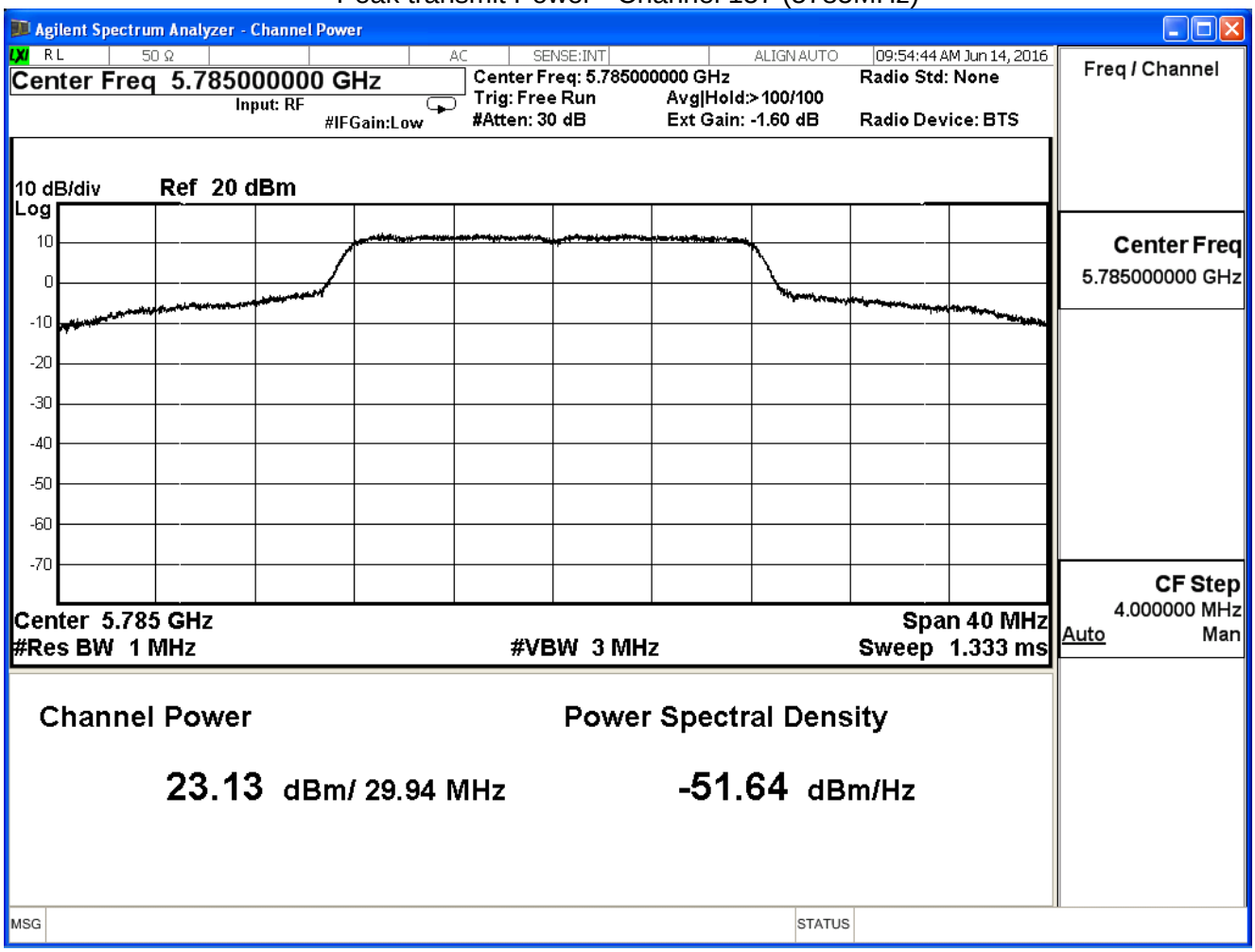
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	23.46	--	--	--	--	--	--	≤30dBm
157	5785	23.13	23.01	22.93	22.81	22.67	22.54	22.35	
165	5825	22.64	--	--	--	--	--	--	

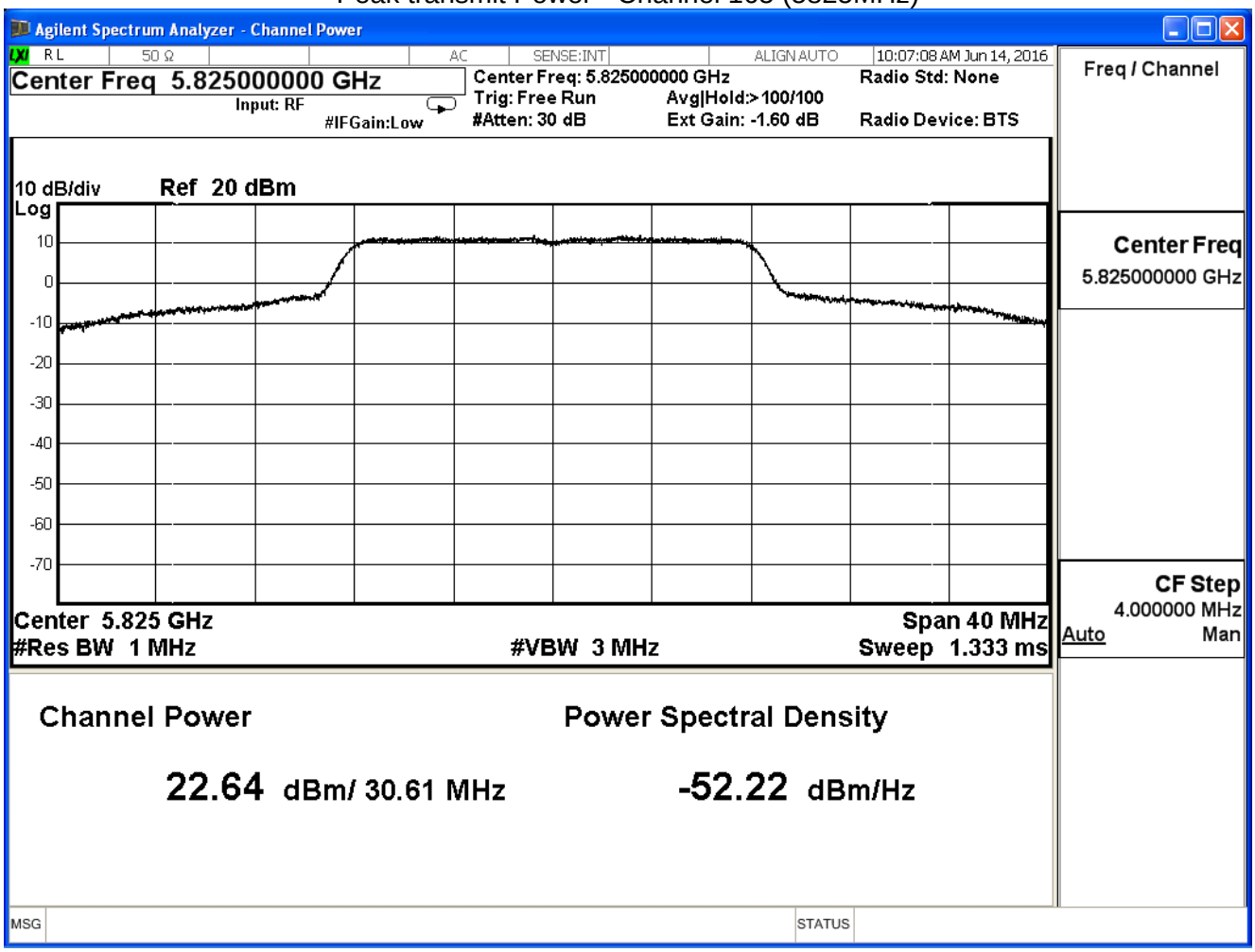
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

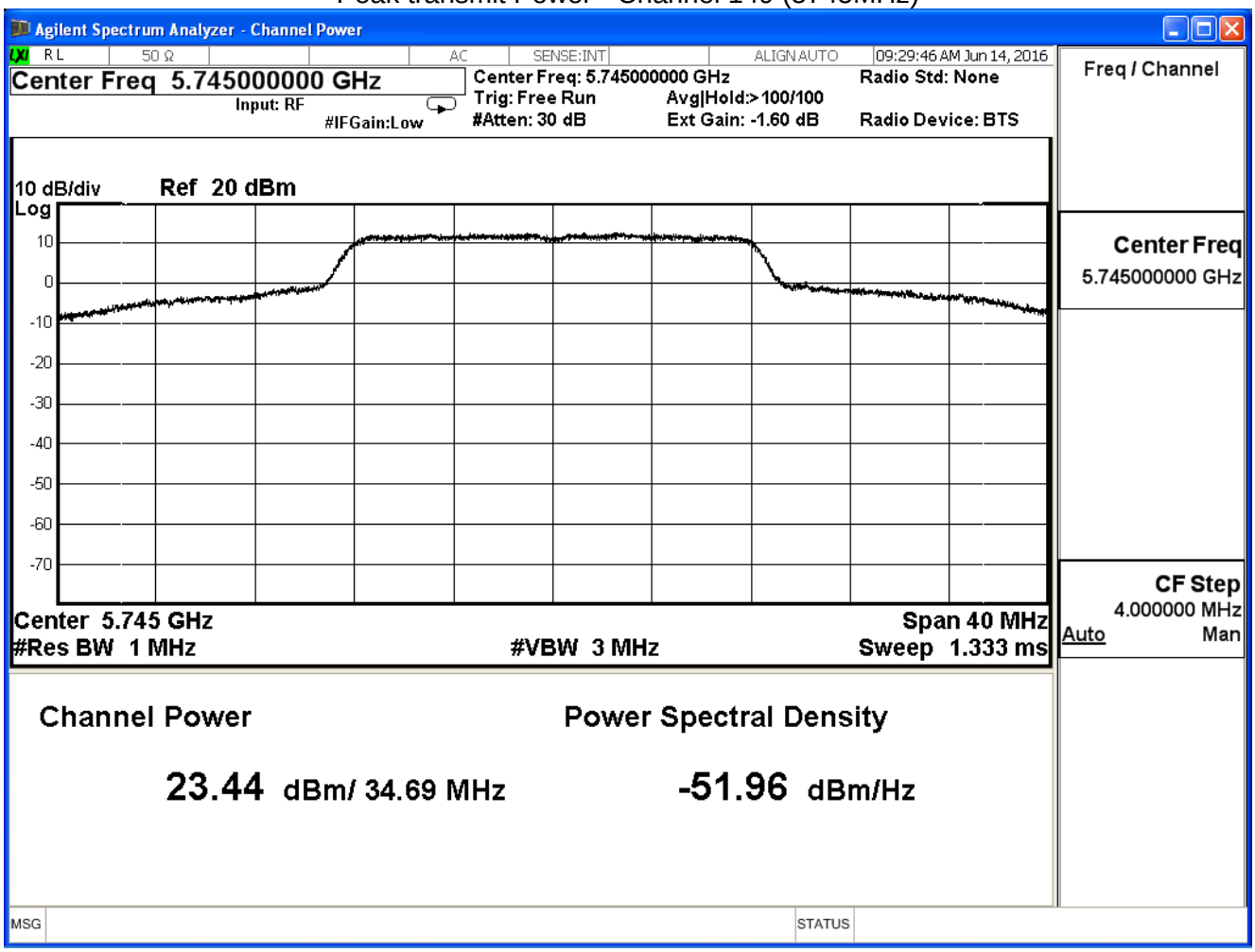
IEEE 802.11a (ANT2)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	23.44	≤30
157	5785	23.19	≤30
165	5825	22.74	≤30

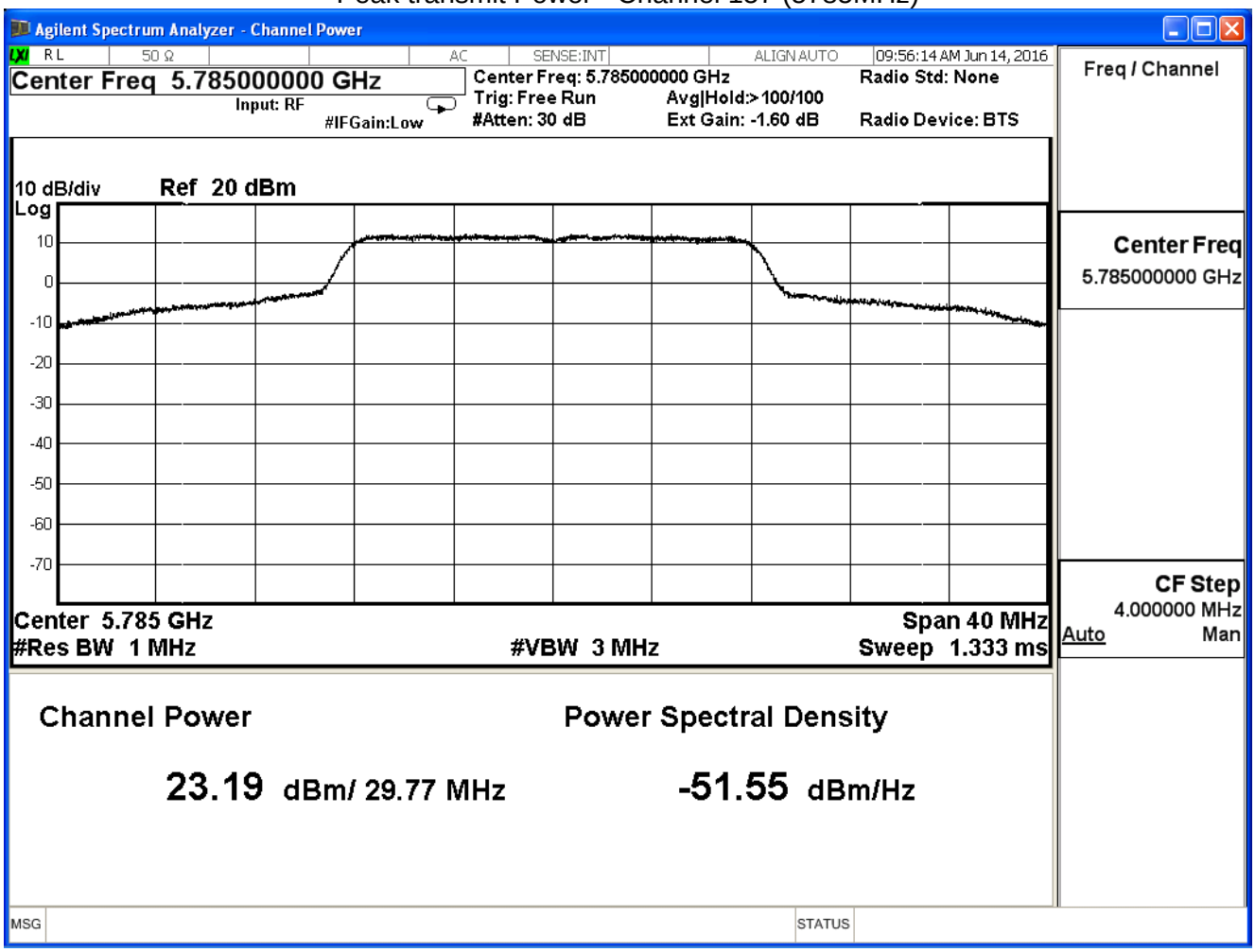
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	23.44	--	--	--	--	--	--	≤30dBm
157	5785	23.19	23.11	22.90	22.78	22.60	22.48	22.29	
165	5825	22.74	--	--	--	--	--	--	

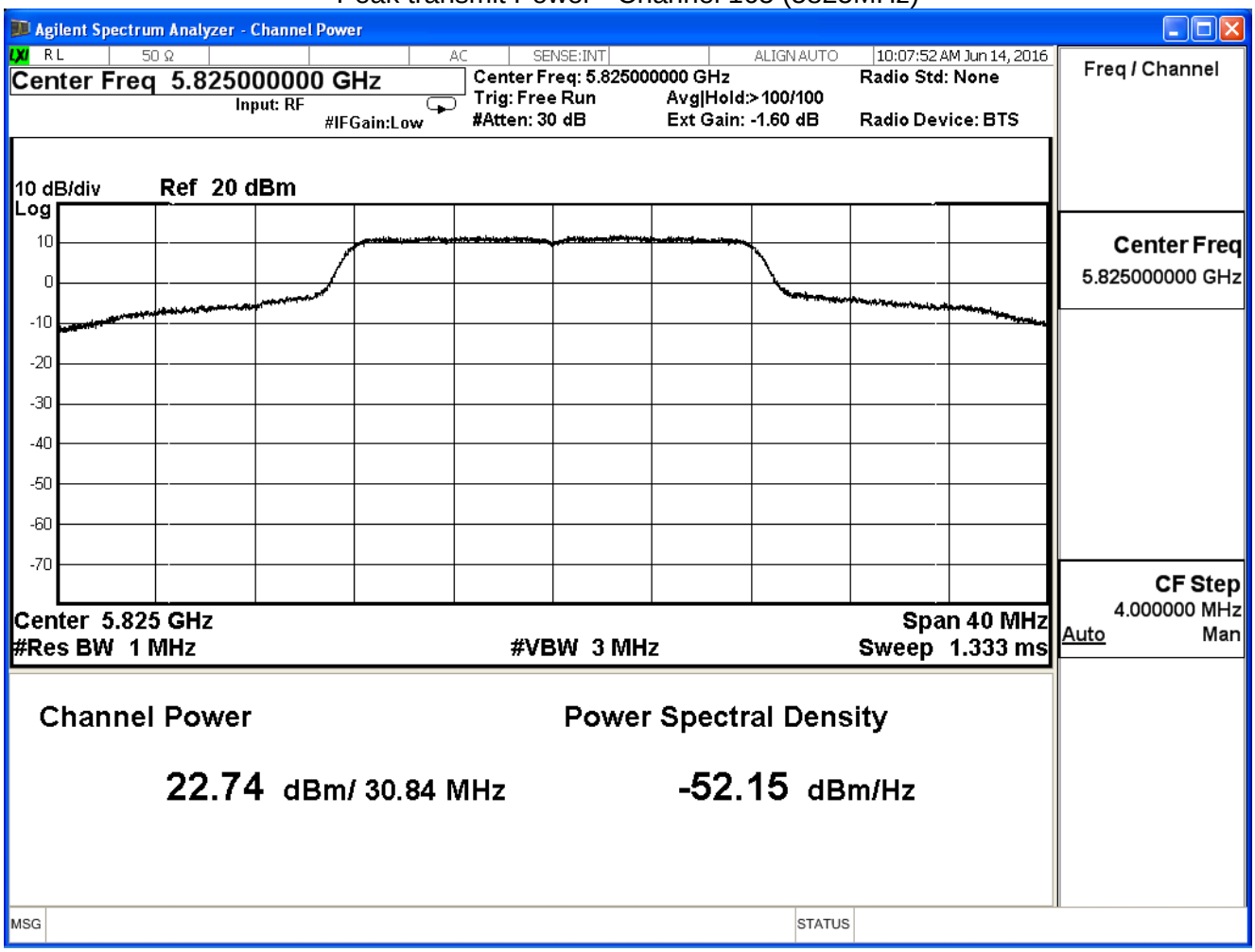
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

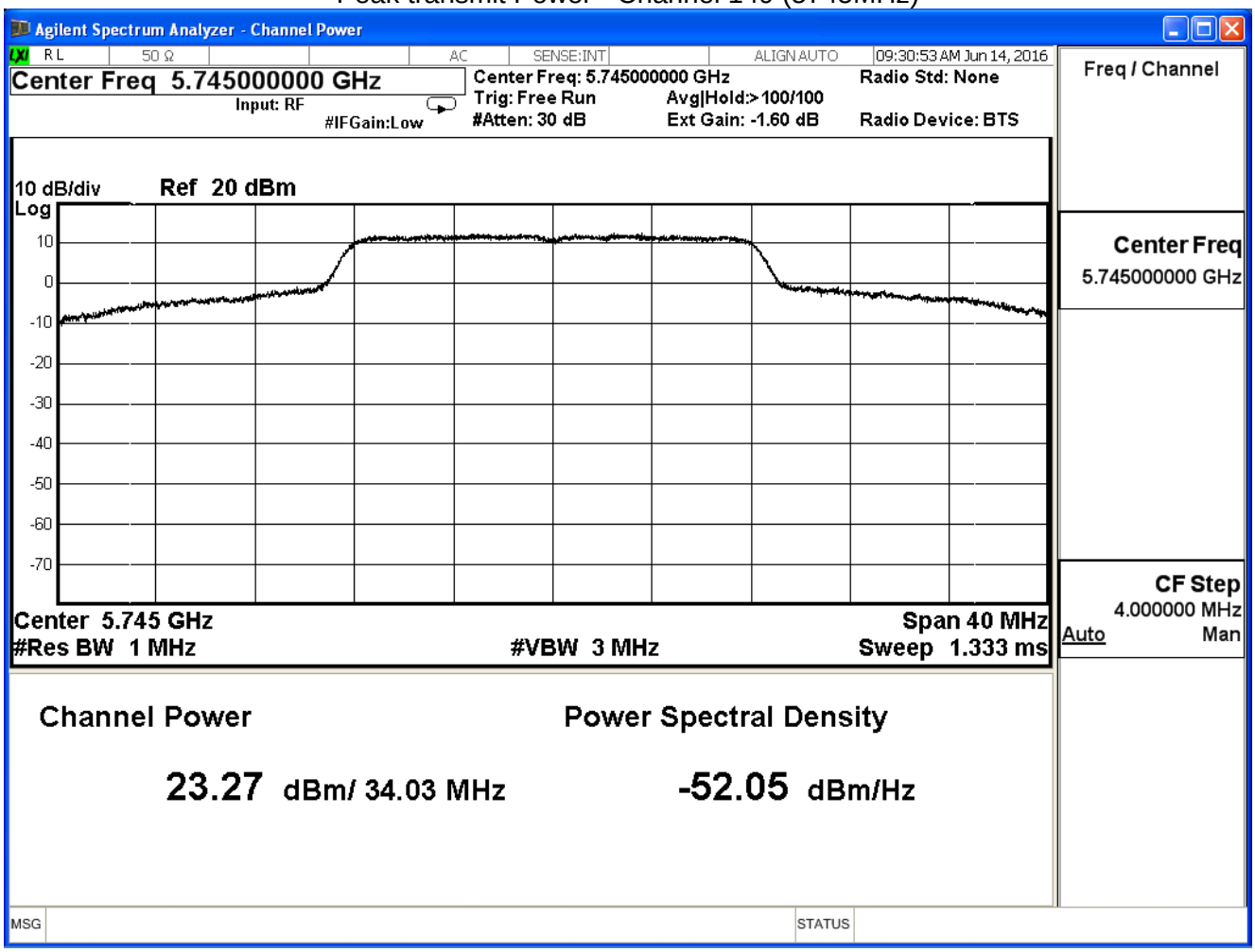
IEEE 802.11a (ANT3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	23.27	≤30
157	5785	23.17	≤30
165	5825	22.74	≤30

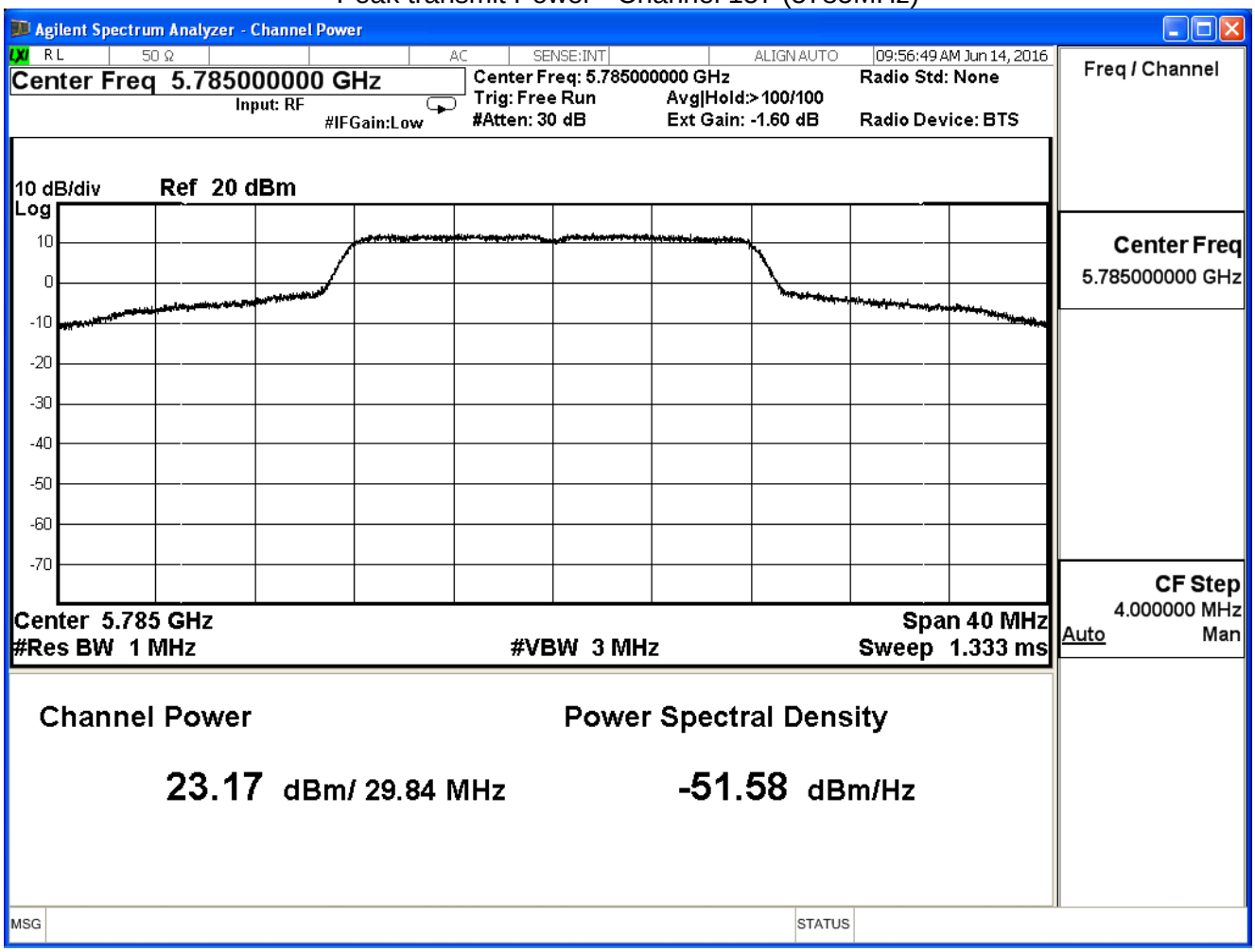
The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	23.27	--	--	--	--	--	--	≤30dBm
157	5785	23.17	23.11	23.00	22.93	22.80	22.66	22.55	
165	5825	22.74	--	--	--	--	--	--	

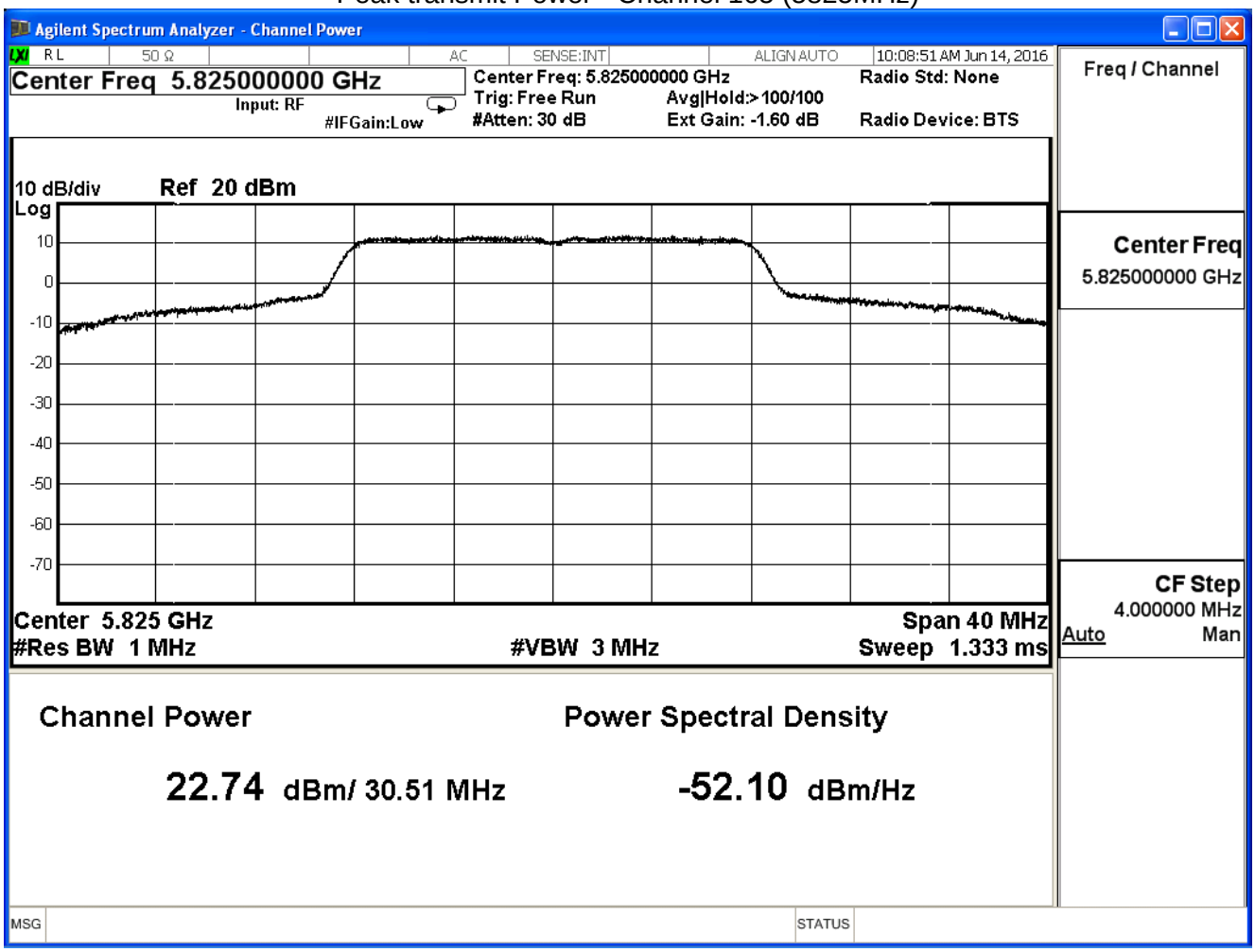
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: TX_CDD Mode (11a)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11a (ANT +1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	29.46	≤30
157	5785	29.17	≤30
165	5825	28.73	≤30

The worst emission of data rate is 6 Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	29.46	--	--	--	--	--	--	≤30dBm
157	5785	29.17	29.07	28.95	28.86	28.73	28.61	28.44	
165	5825	28.73	--	--	--	--	--	--	

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11n 20MHz (ANT 0)

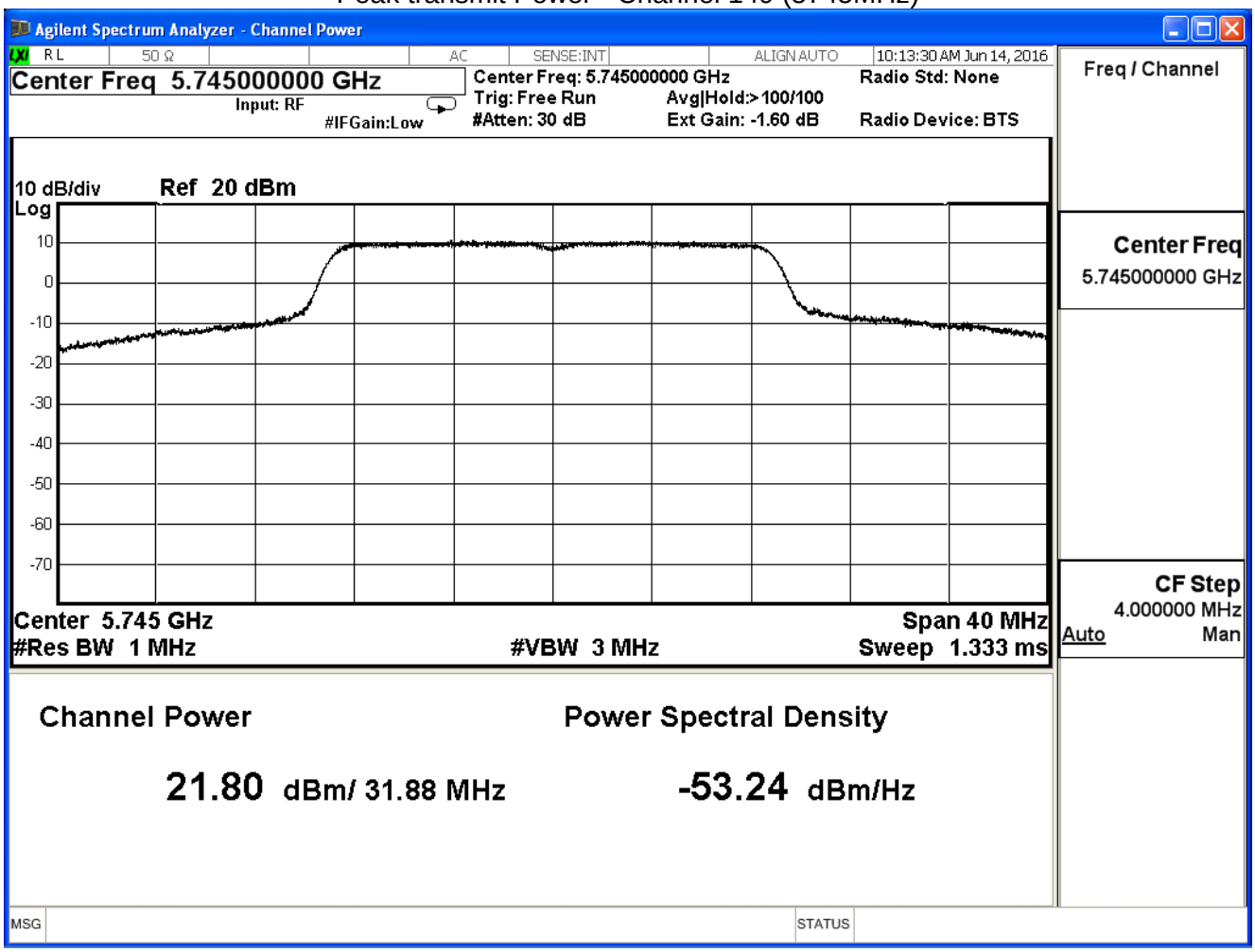
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	21.80	≤28.24
157	5785	21.69	≤28.24
165	5825	21.69	≤28.24

The worst emission of data rate is 26 Mbps.

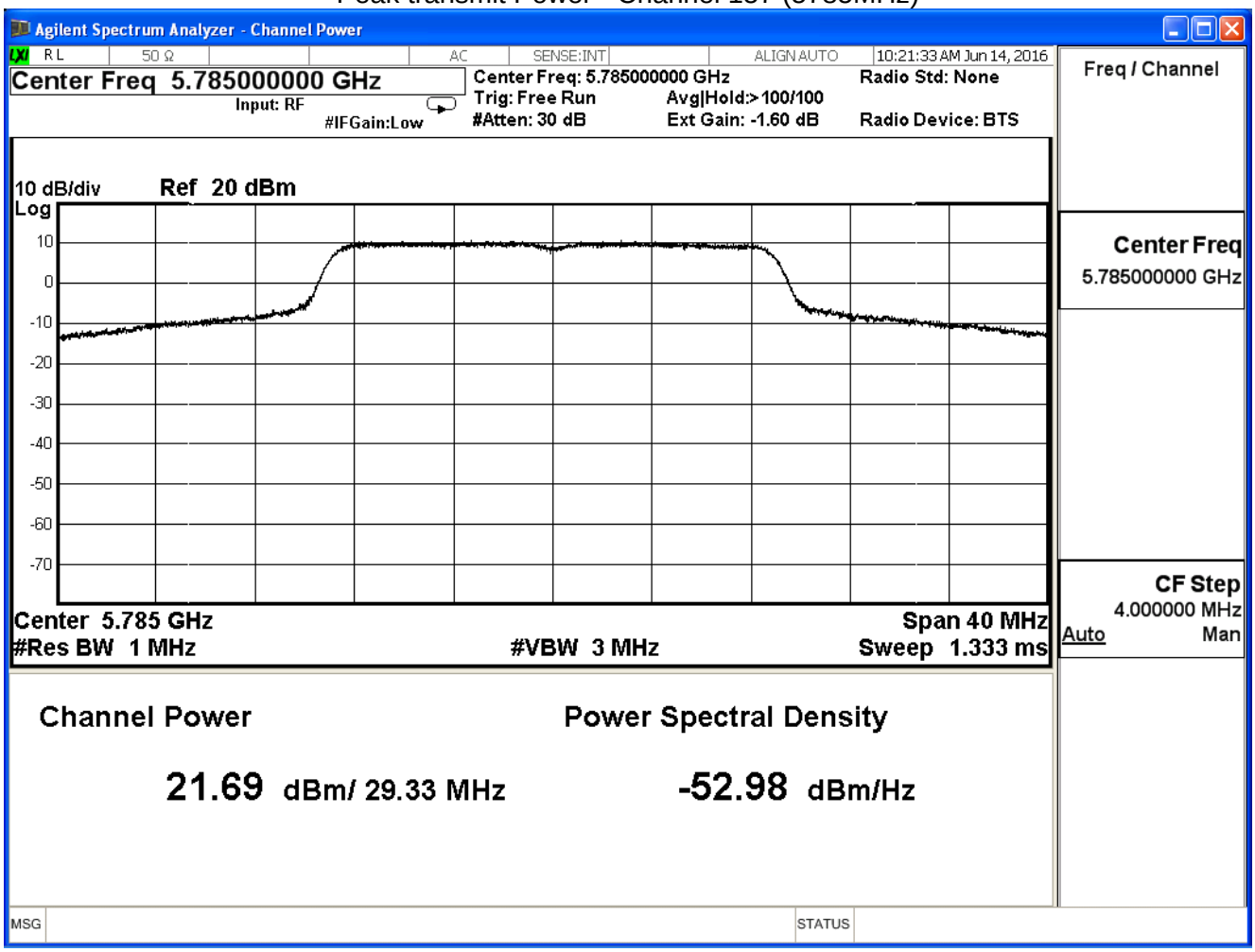
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
149	5745	21.80	--	--	--	--	--	--	--	≤28.24dBm
157	5785	21.69	21.55	21.47	21.30	21.18	20.03	19.93	19.75	
165	5825	21.69	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

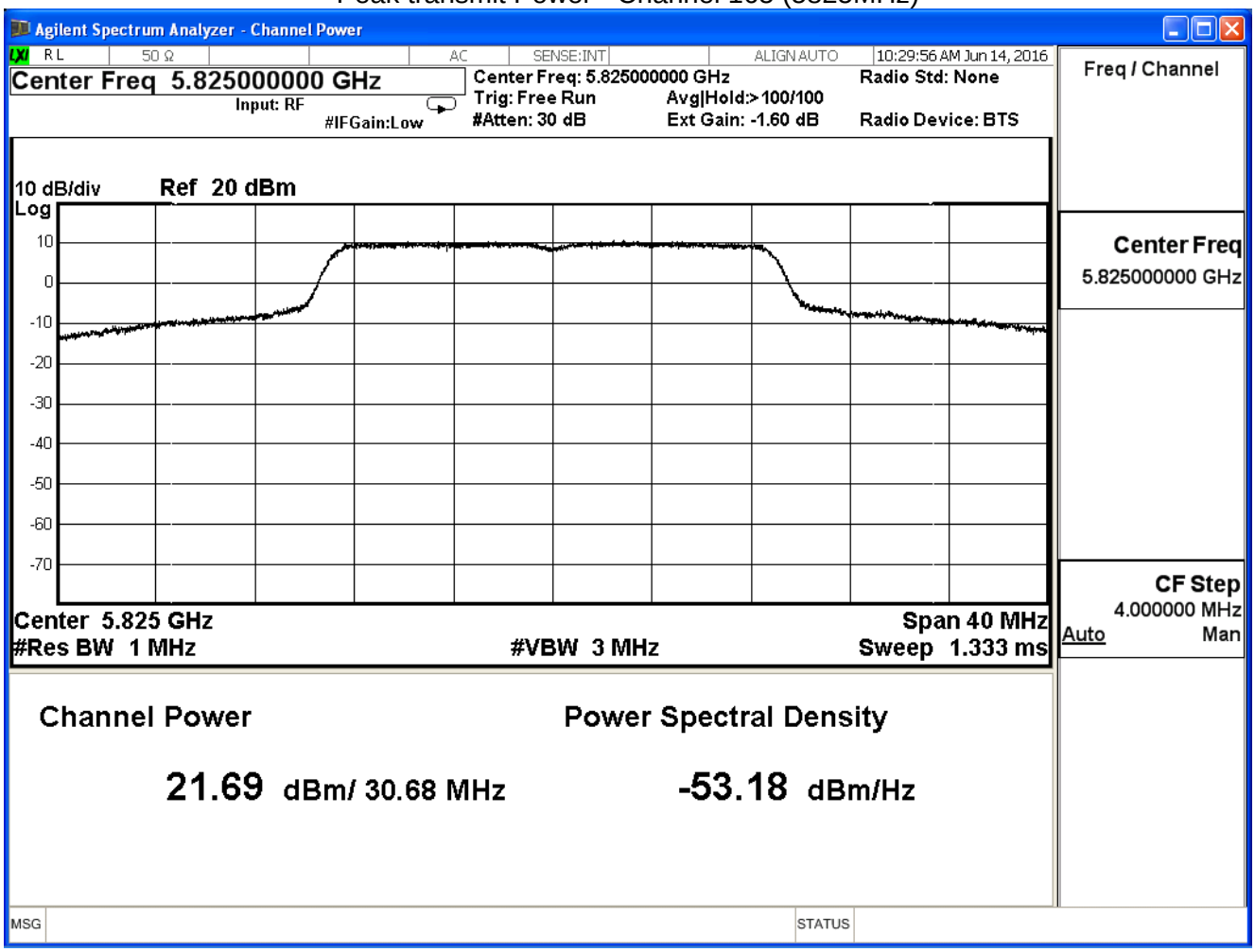
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11n 20MHz (ANT 1)

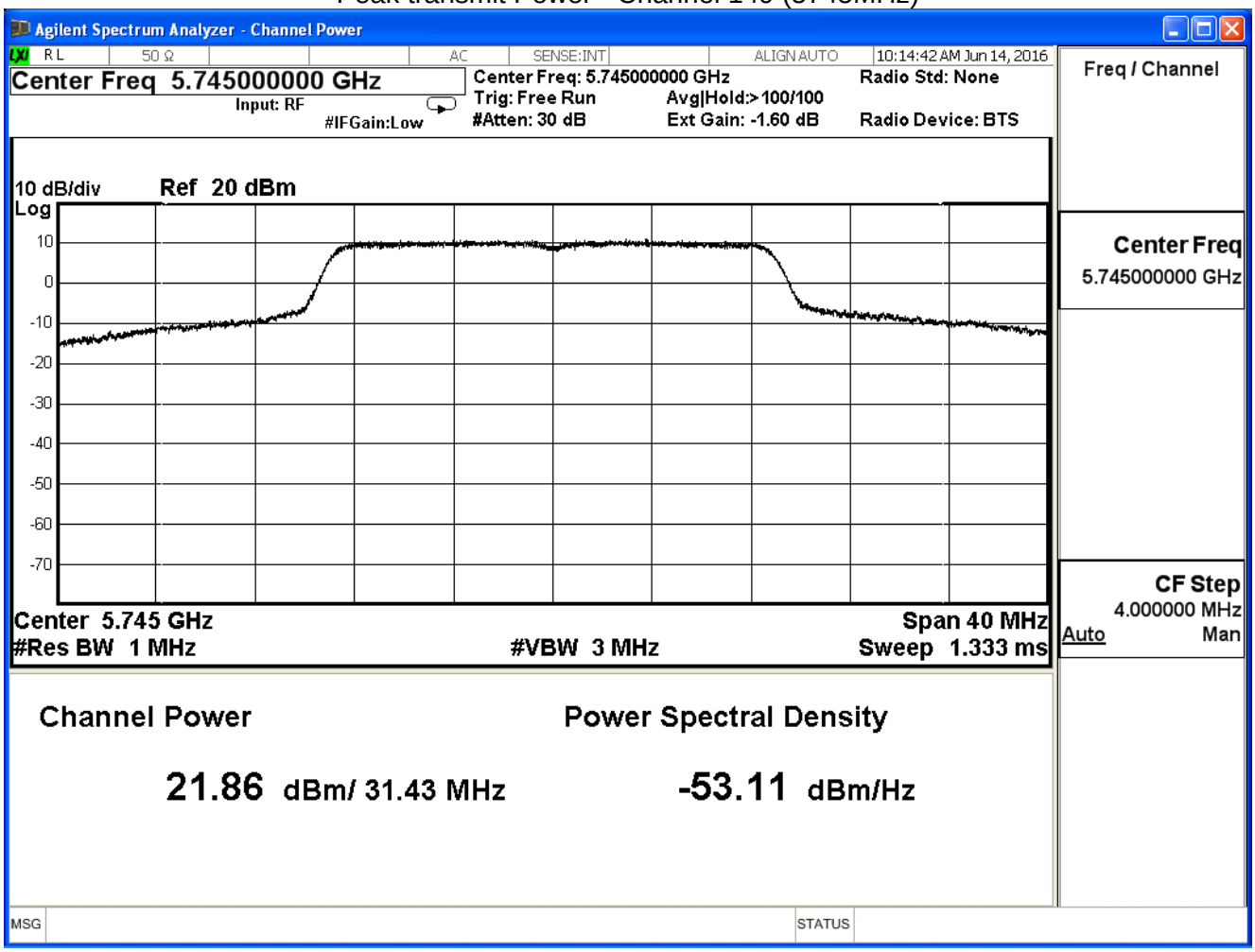
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	21.86	≤28.24
157	5785	21.78	≤28.24
165	5825	21.82	≤28.24

The worst emission of data rate is 26 Mbps.

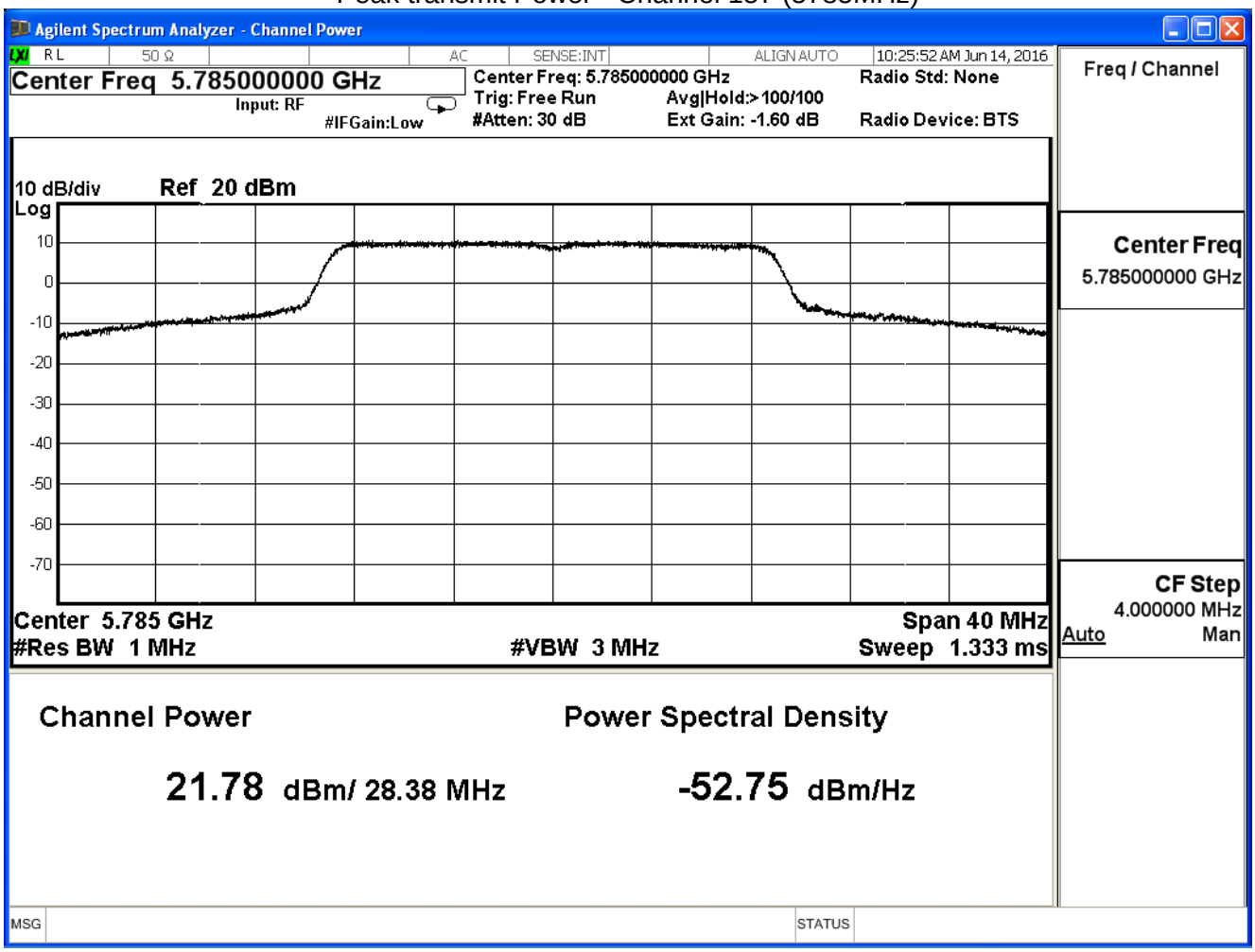
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
149	5745	21.86	--	--	--	--	--	--	--	≤28.24dBm
157	5785	21.78	21.68	21.55	21.44	21.30	21.15	21.00	20.88	
165	5825	21.82	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

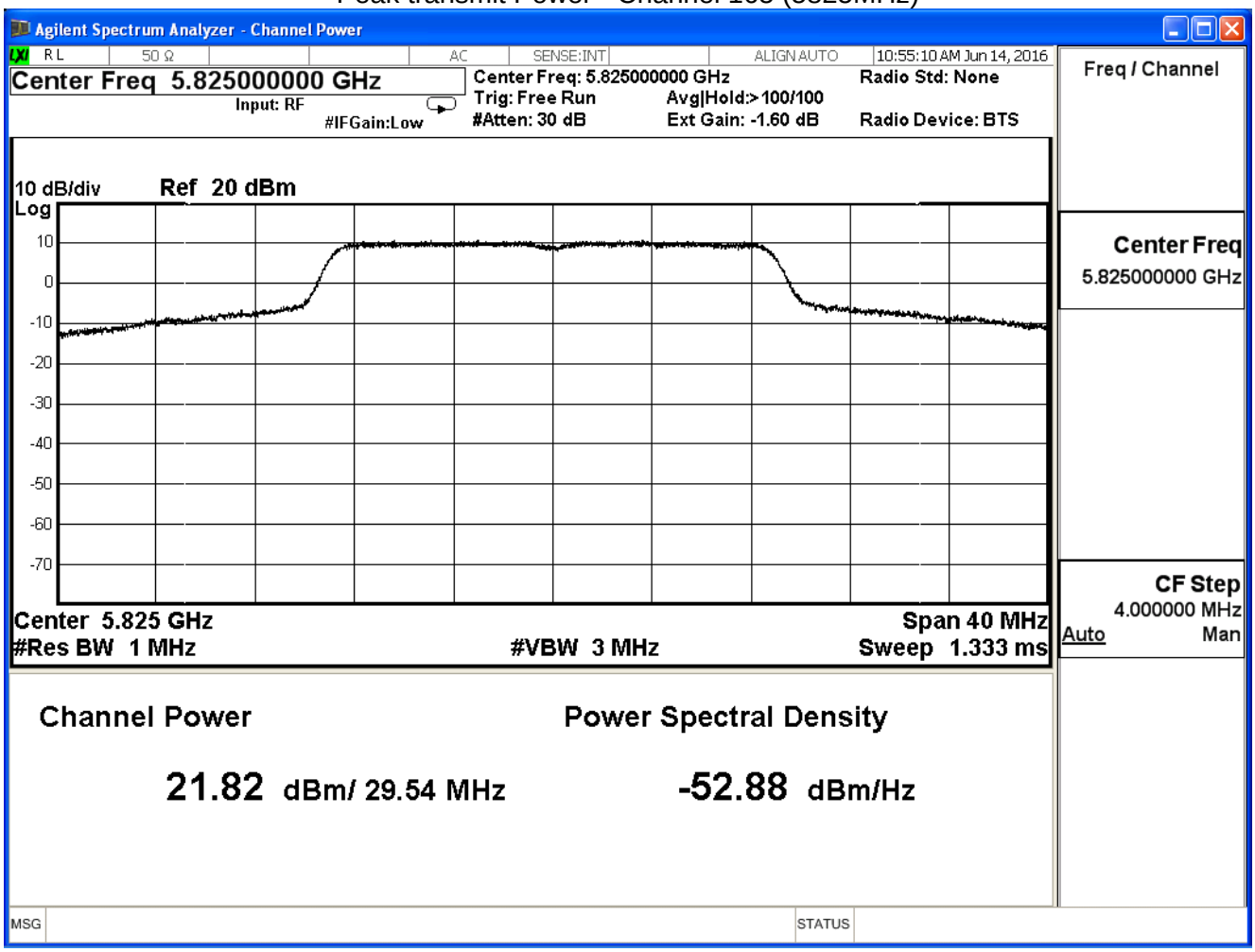
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11n 20MHz (ANT 2)

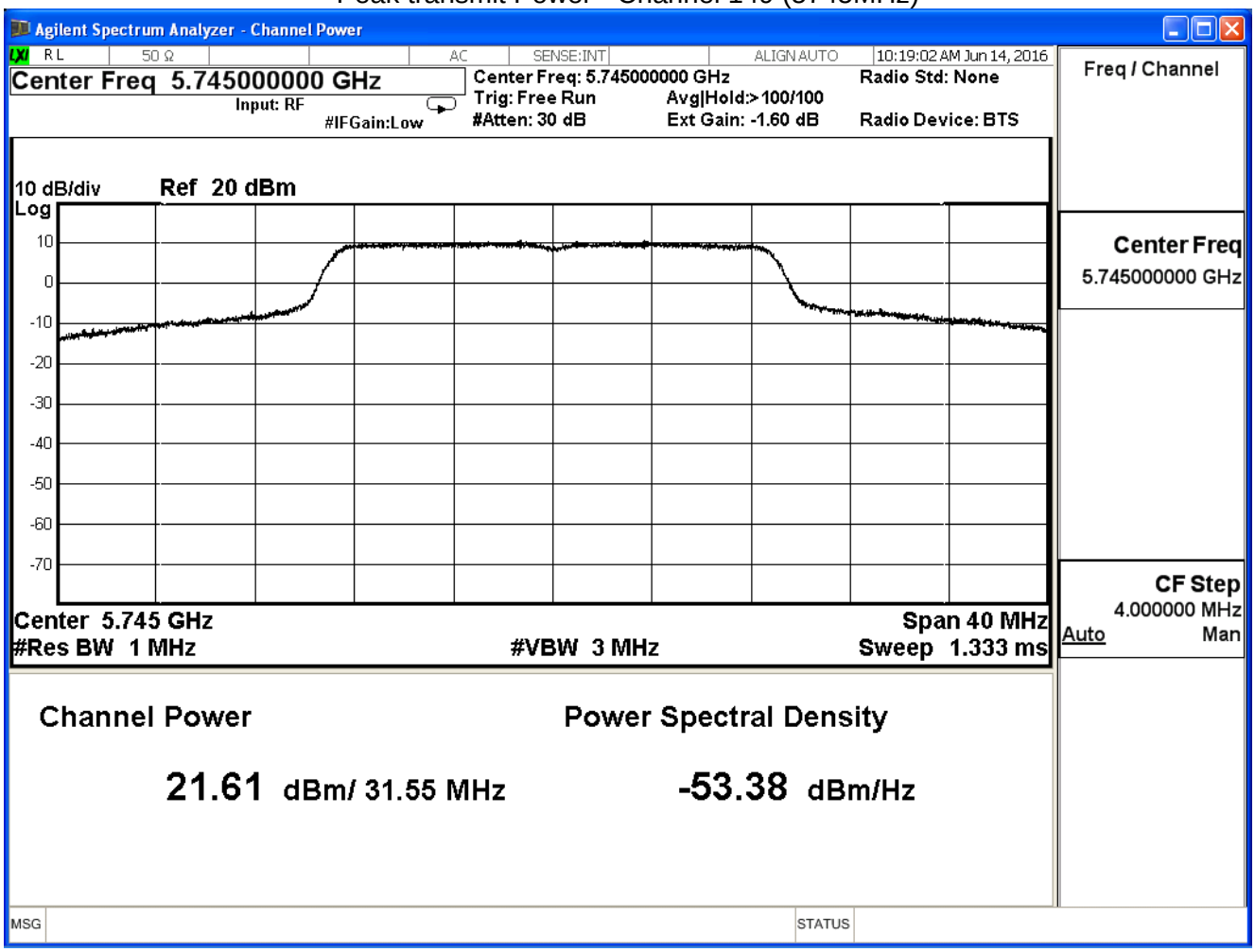
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	21.61	≤28.24
157	5785	21.85	≤28.24
165	5825	21.80	≤28.24

The worst emission of data rate is 26 Mbps.

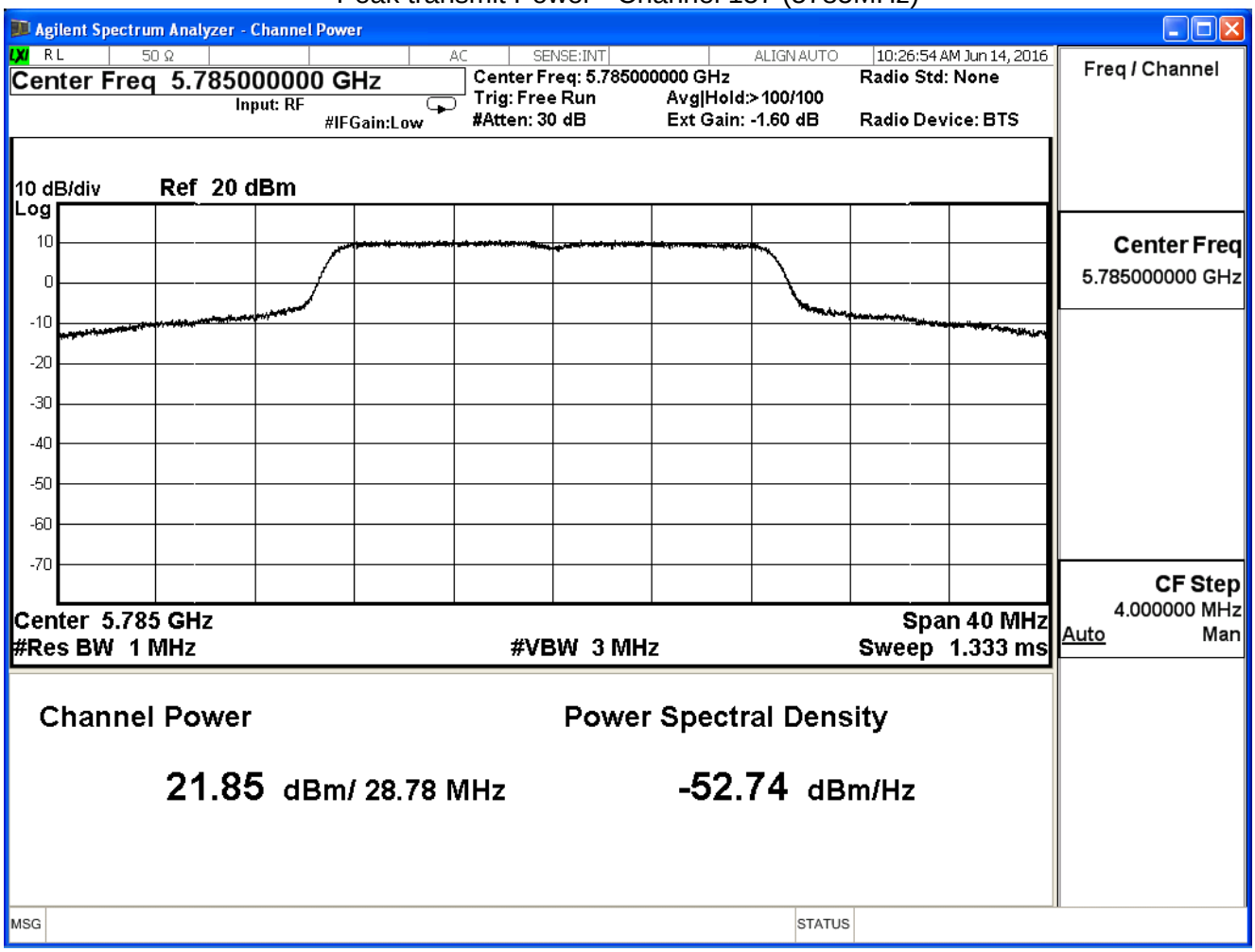
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
149	5745	21.61	--	--	--	--	--	--	--	≤28.24dBm
157	5785	21.85	21.72	21.60	21.55	21.31	21.22	21.10	20.93	
165	5825	21.80	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

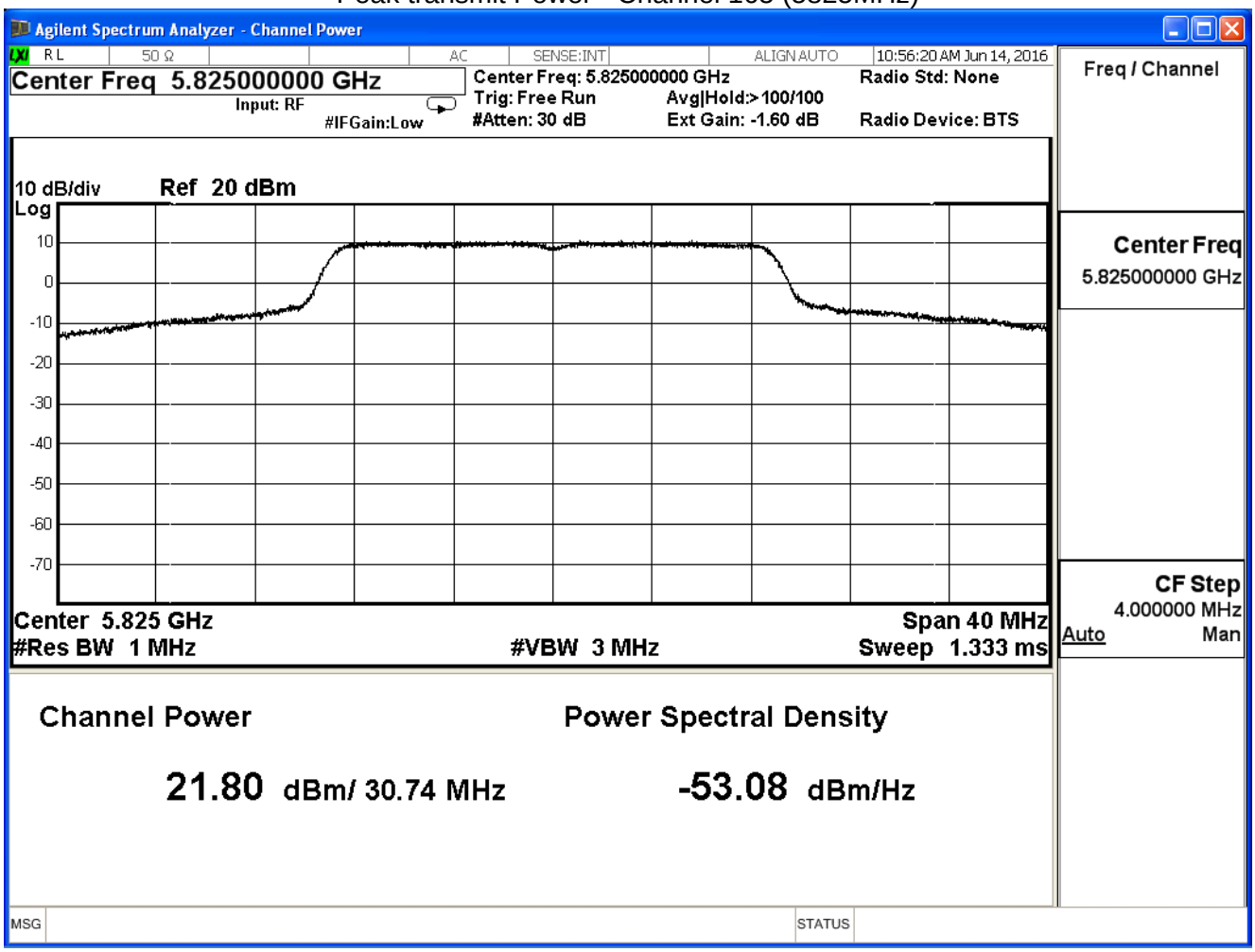
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11n 20MHz (ANT 3)

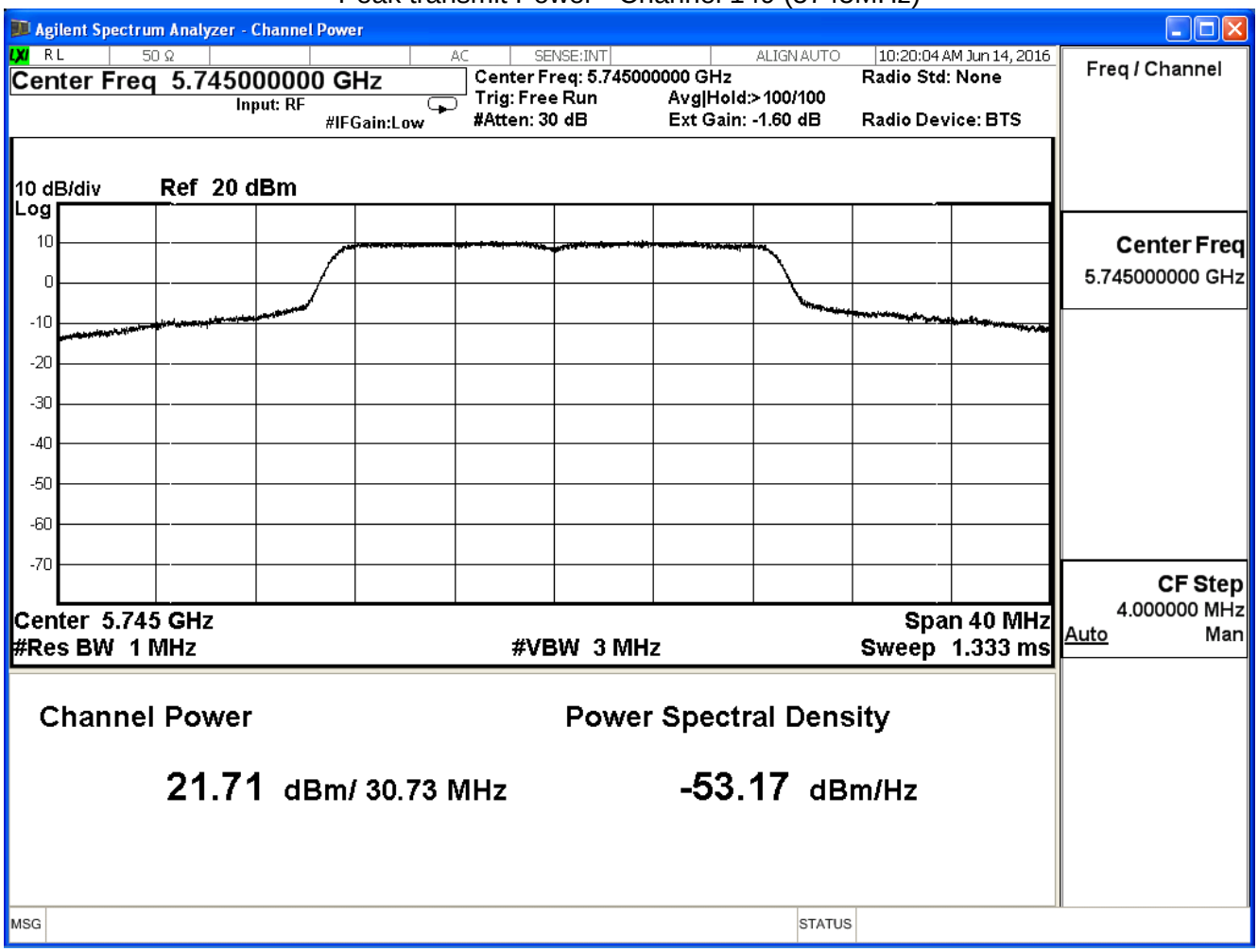
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	21.71	≤28.24
157	5785	21.64	≤28.24
165	5825	21.72	≤28.24

The worst emission of data rate is 26 Mbps.

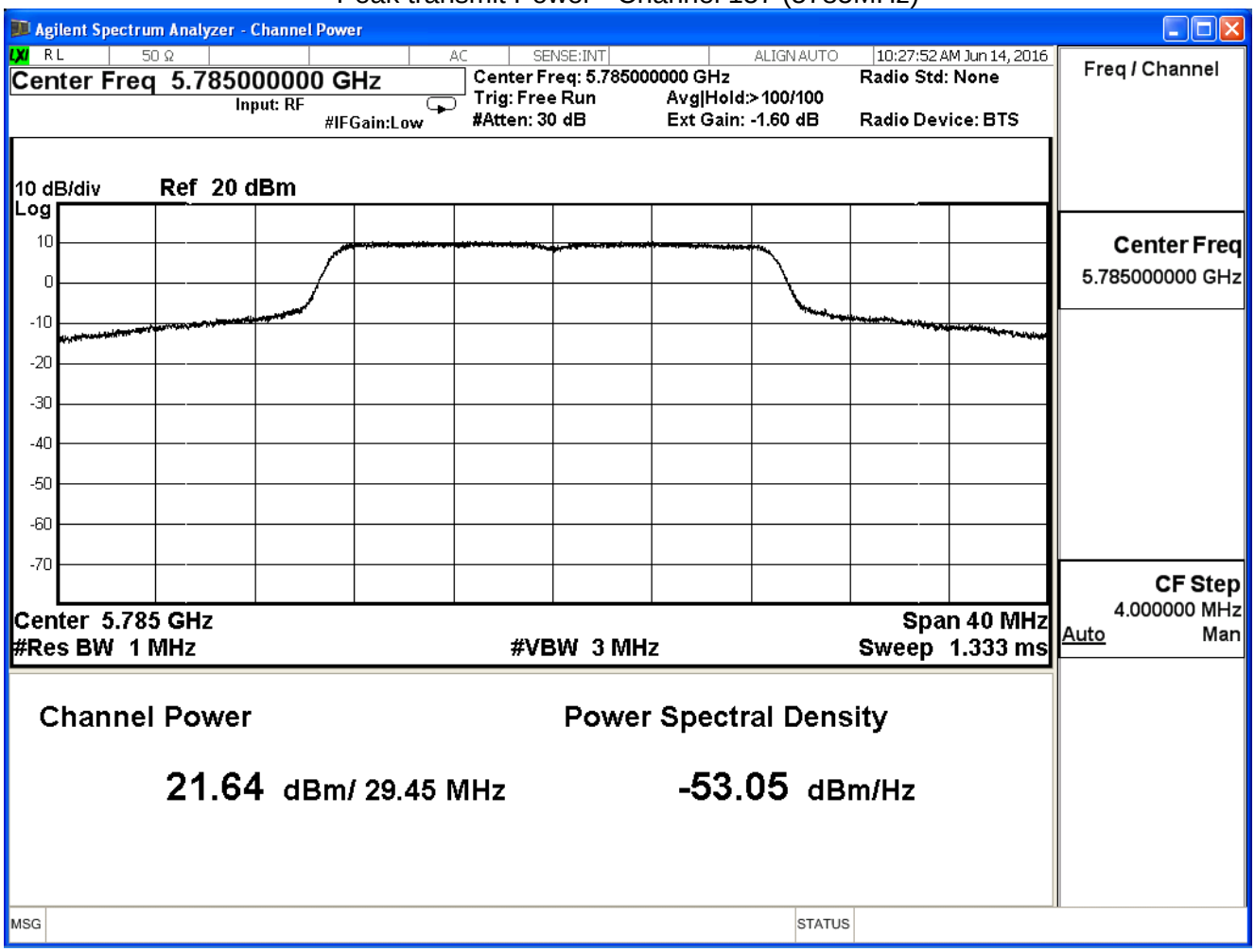
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
149	5745	21.71	--	--	--	--	--	--	--	≤28.24dBm
157	5785	21.64	21.55	21.35	21.24	21.03	20.94	20.77	20.63	
165	5825	21.72	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

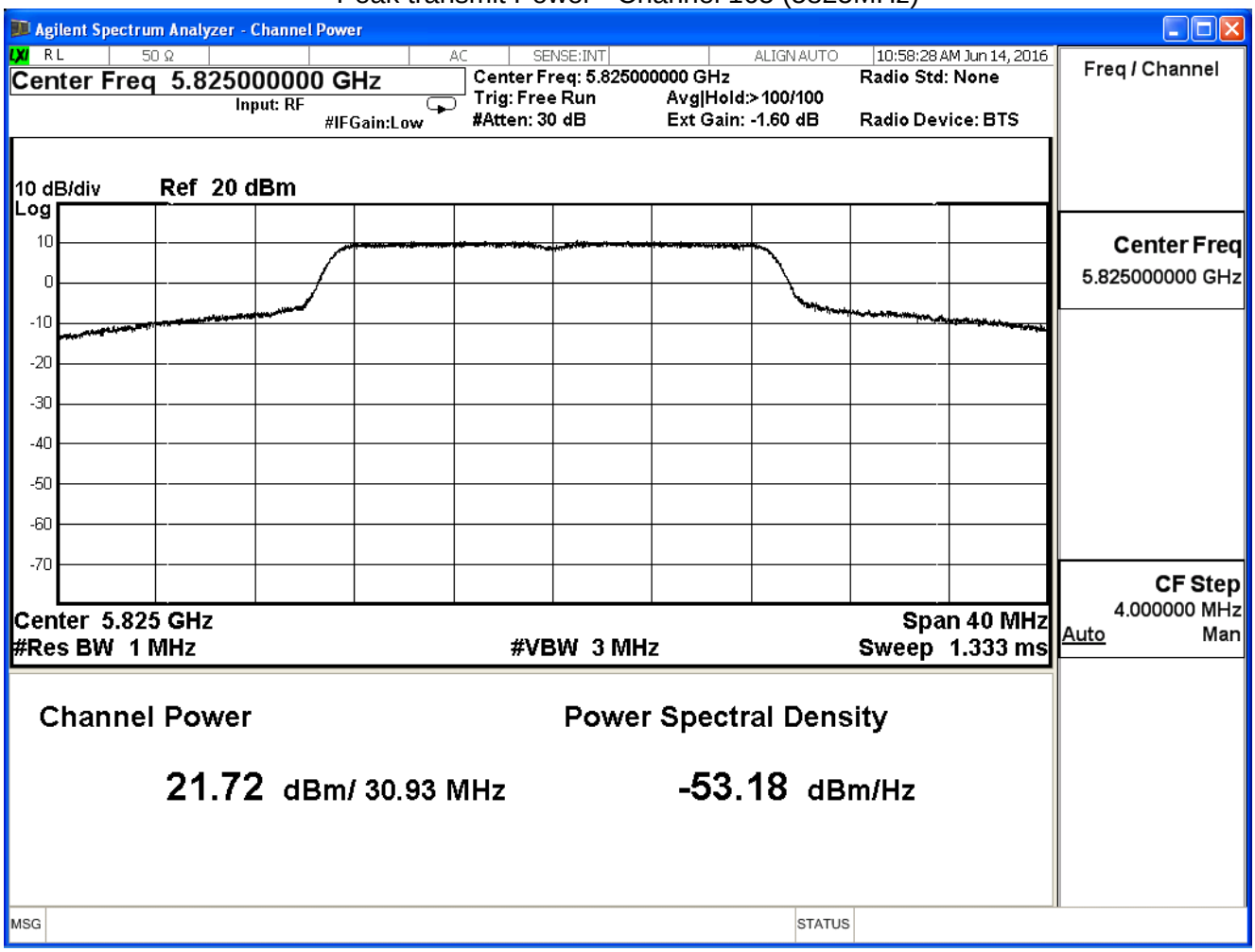
Peak transmit Power - Channel 149 (5745MHz)



Peak transmit Power - Channel 157 (5785MHz)



Peak transmit Power - Channel 165 (5825MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE 802.11n 20MHz (ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	27.77	≤28.24
157	5785	27.76	≤28.24
165	5825	27.78	≤28.24

The worst emission of data rate is 26 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		26	52	78	104	156	208	234	260	
149	5745	27.77	--	--	--	--	--	--	--	≤28.24dBm
157	5785	27.76	27.65	27.51	27.40	27.23	26.88	26.74	26.59	
165	5825	27.78	--	--	--	--	--	--	--	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

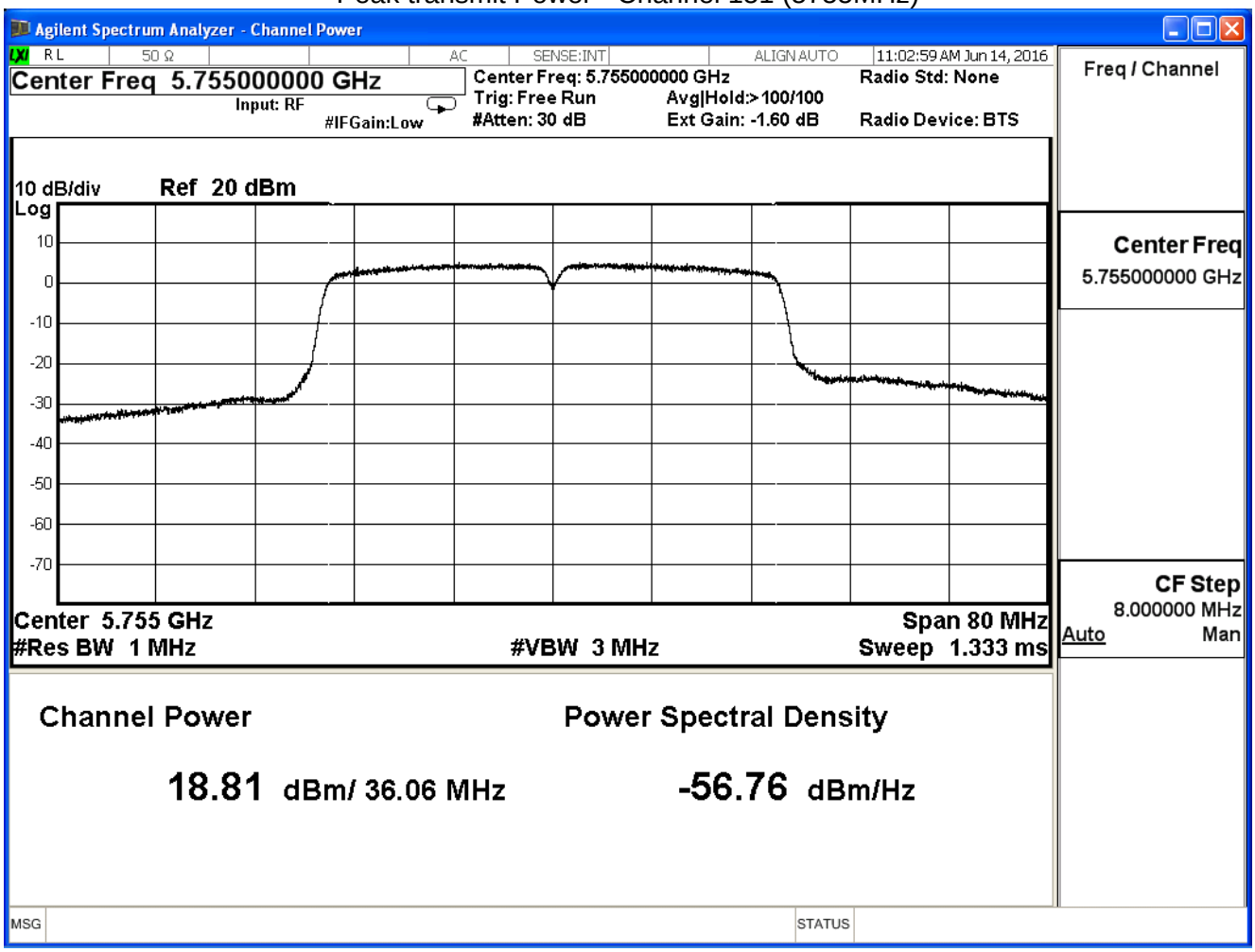
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	18.81	≤28.24
159	5795	21.84	≤28.24

The worst emission of data rate is 54 Mbps.

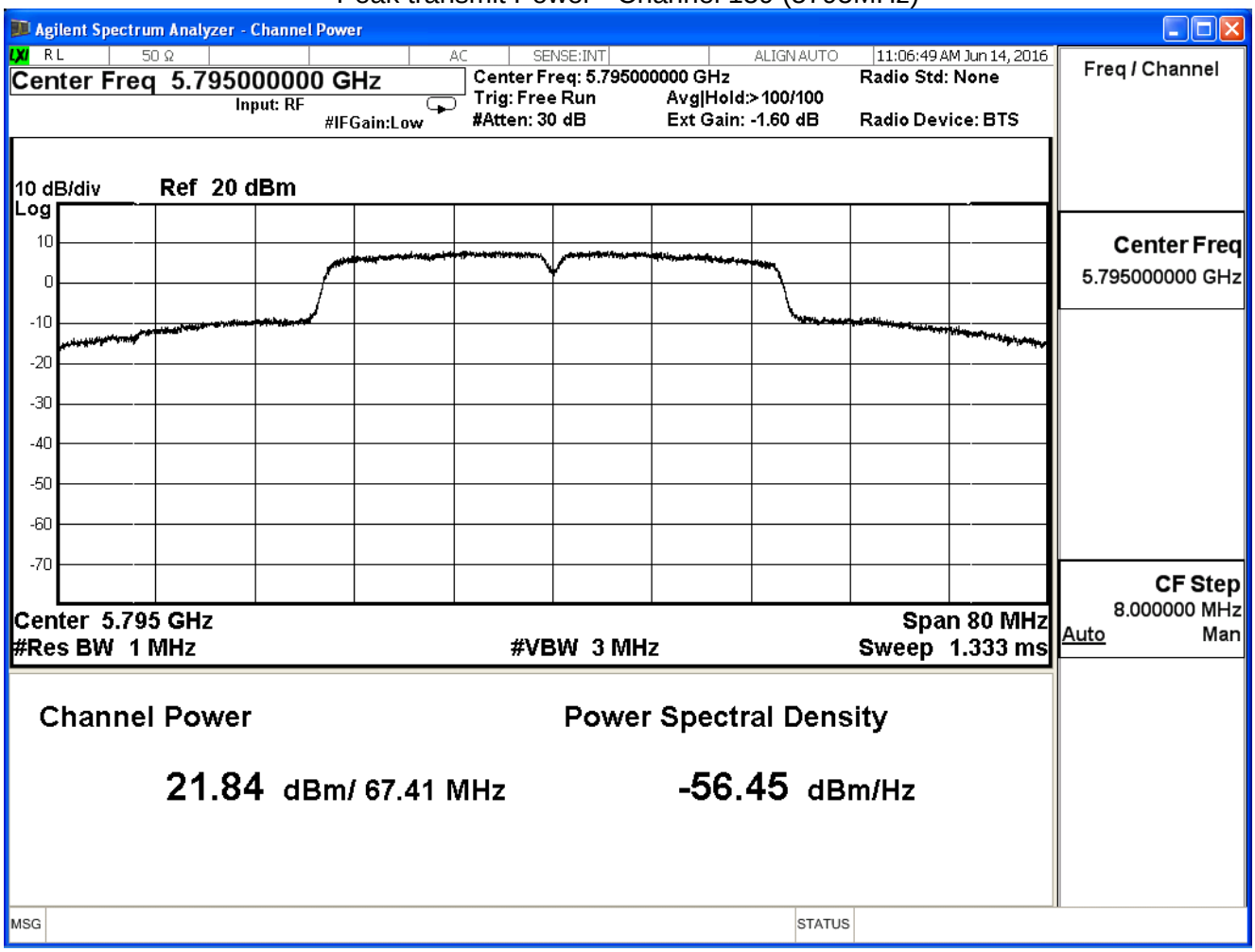
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
151	5755	18.81	--	--	--	--	--	--	--	≤28.24dBm
159	5795	21.84	21.71	21.60	21.45	21.30	21.22	21.09	20.93	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 151 (5755MHz)



Peak transmit Power - Channel 159 (5795MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11n 40MHz(ANT 1)

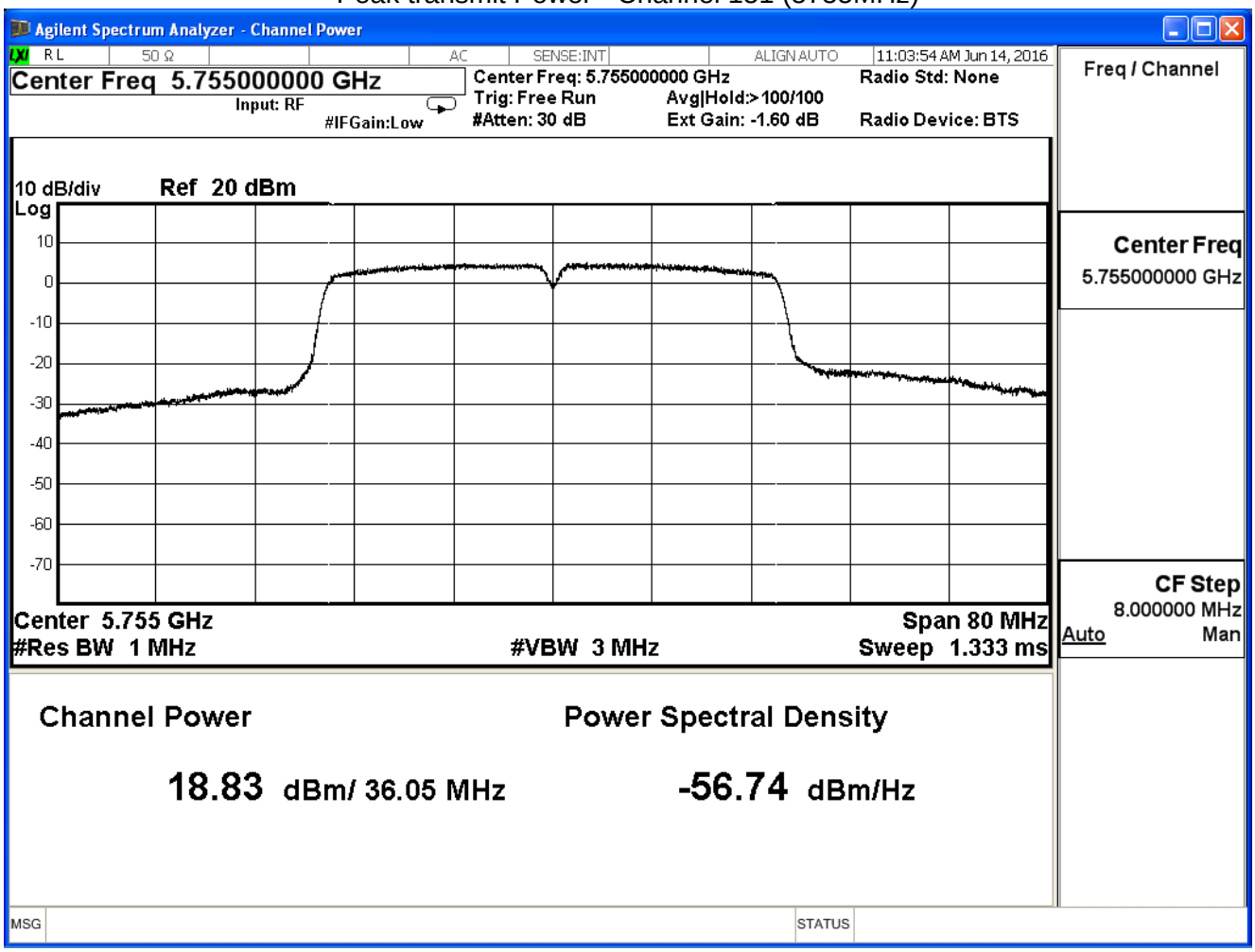
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	18.83	≤28.24
159	5795	21.95	≤28.24

The worst emission of data rate is 54 Mbps.

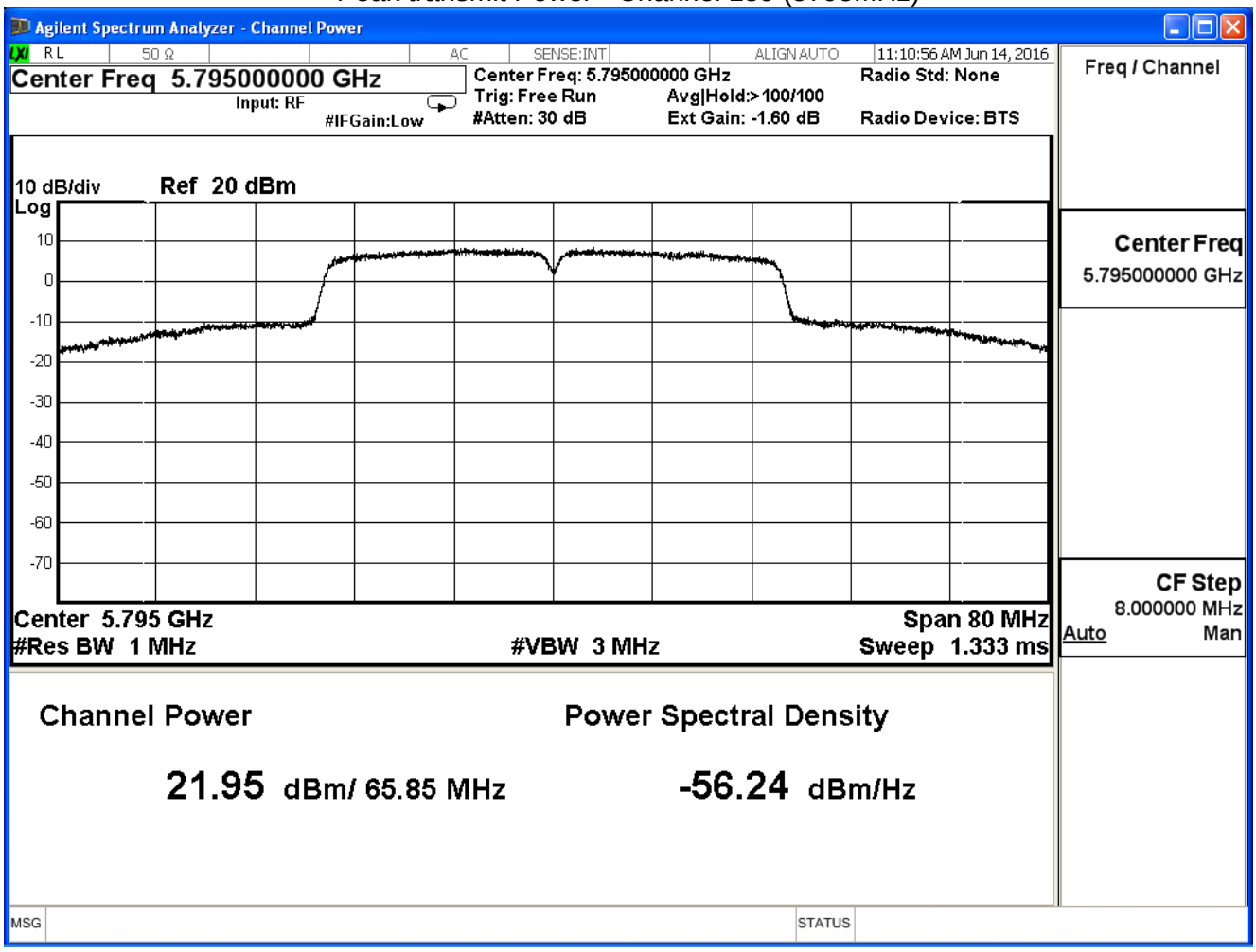
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
151	5755	18.83	--	--	--	--	--	--	--	≤28.24dBm
159	5795	21.95	21.82	21.70	21.55	21.42	21.25	21.02	20.93	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 151 (5755MHz)



Peak transmit Power - Channel 159 (5795MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11n 40MHz(ANT 2)

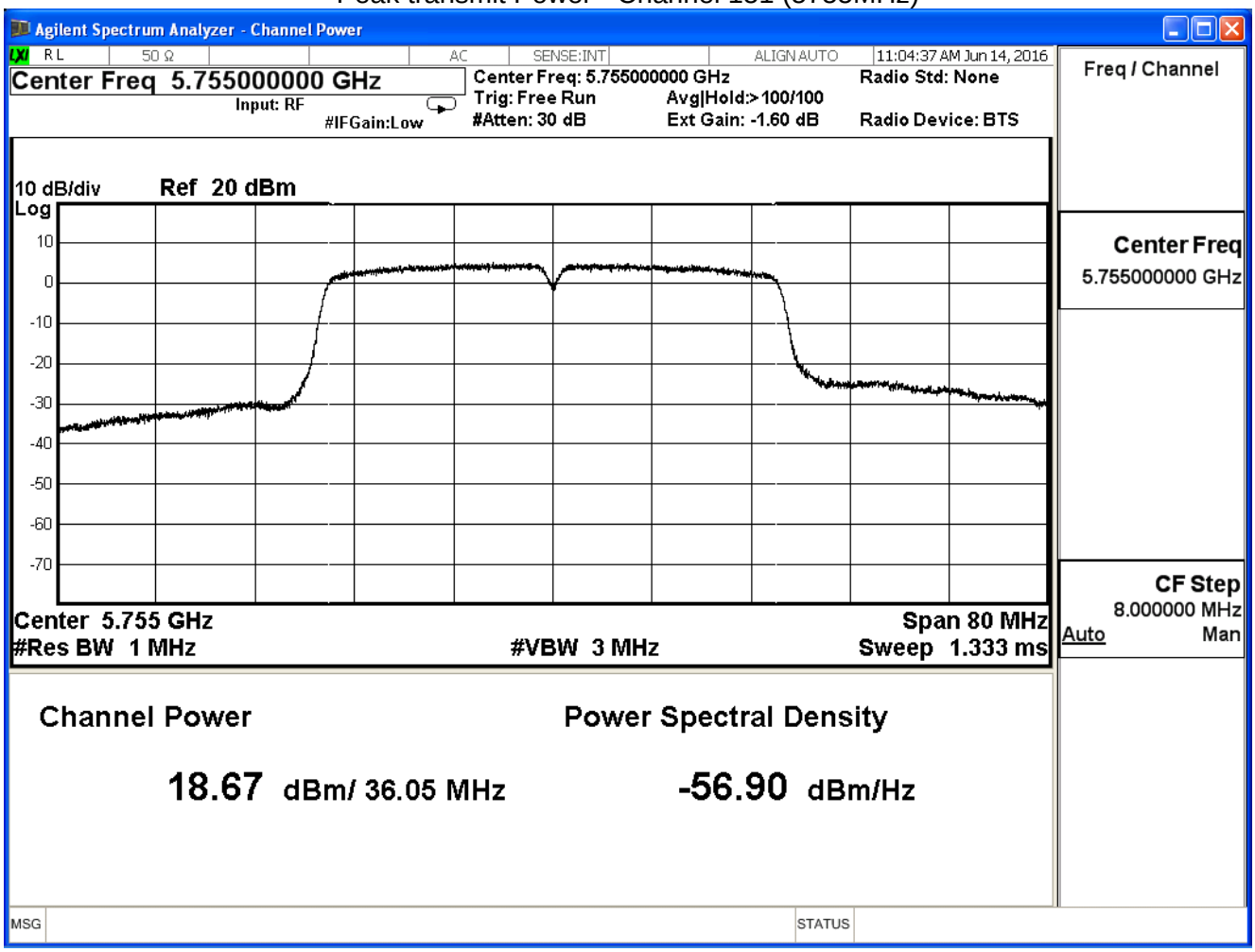
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	18.67	≤28.24
159	5795	21.67	≤28.24

The worst emission of data rate is 54 Mbps.

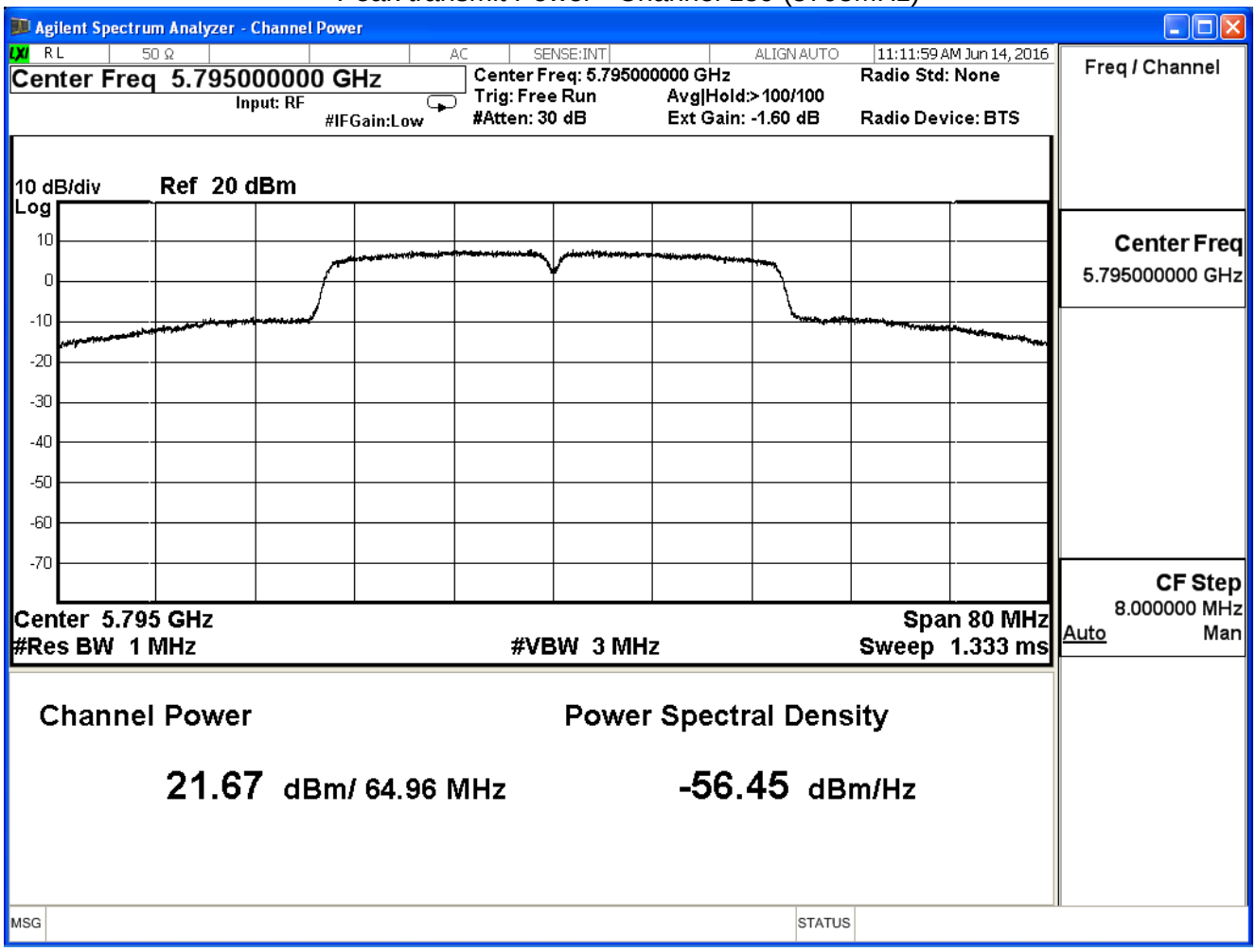
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
151	5755	18.67	--	--	--	--	--	--	--	≤28.24dBm
159	5795	21.67	21.55	21.32	21.20	21.08	20.93	20.84	20.72	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 151 (5755MHz)



Peak transmit Power - Channel 159 (5795MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11n 40MHz(ANT 3)

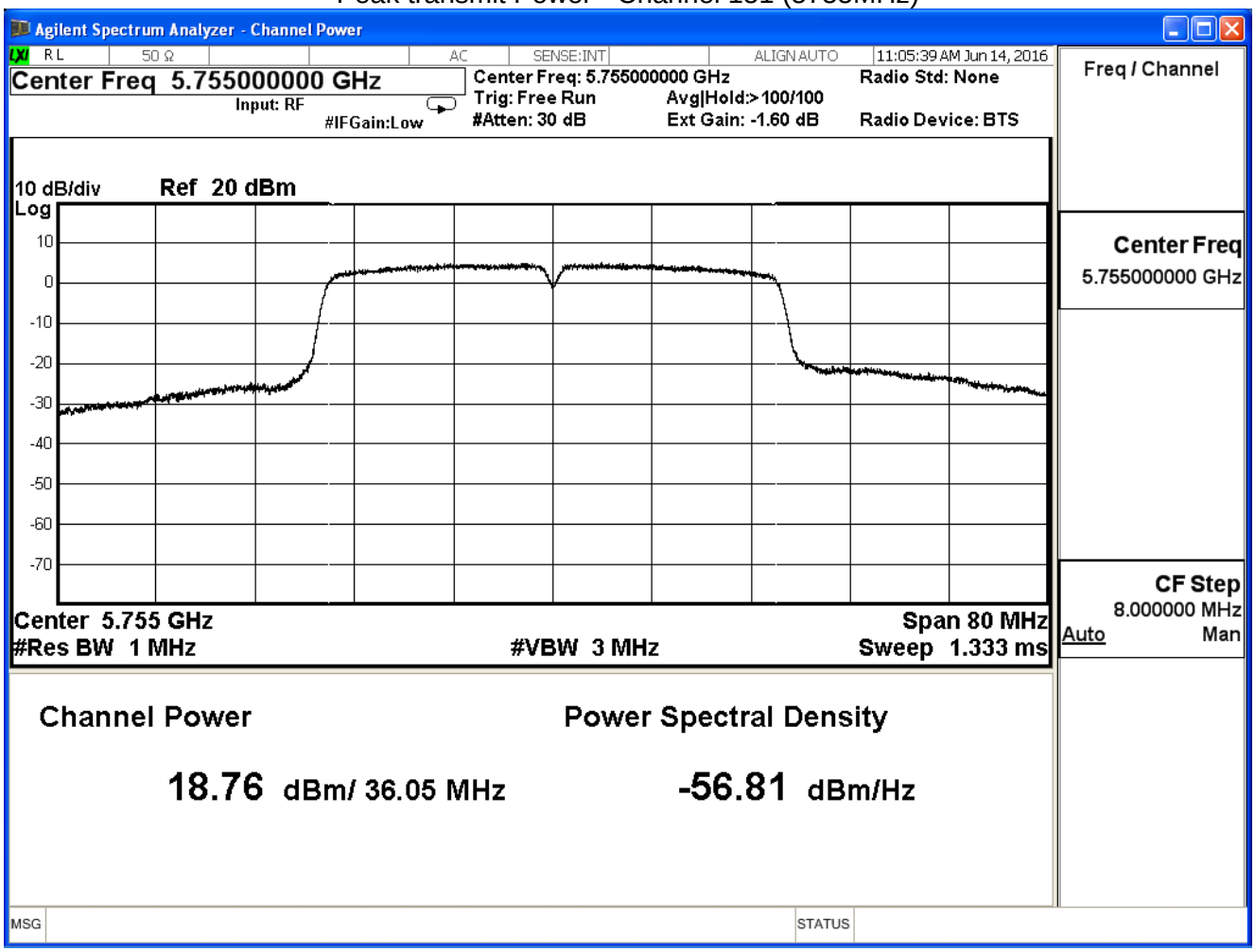
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	18.76	≤28.24
159	5795	21.63	≤28.24

The worst emission of data rate is 54 Mbps.

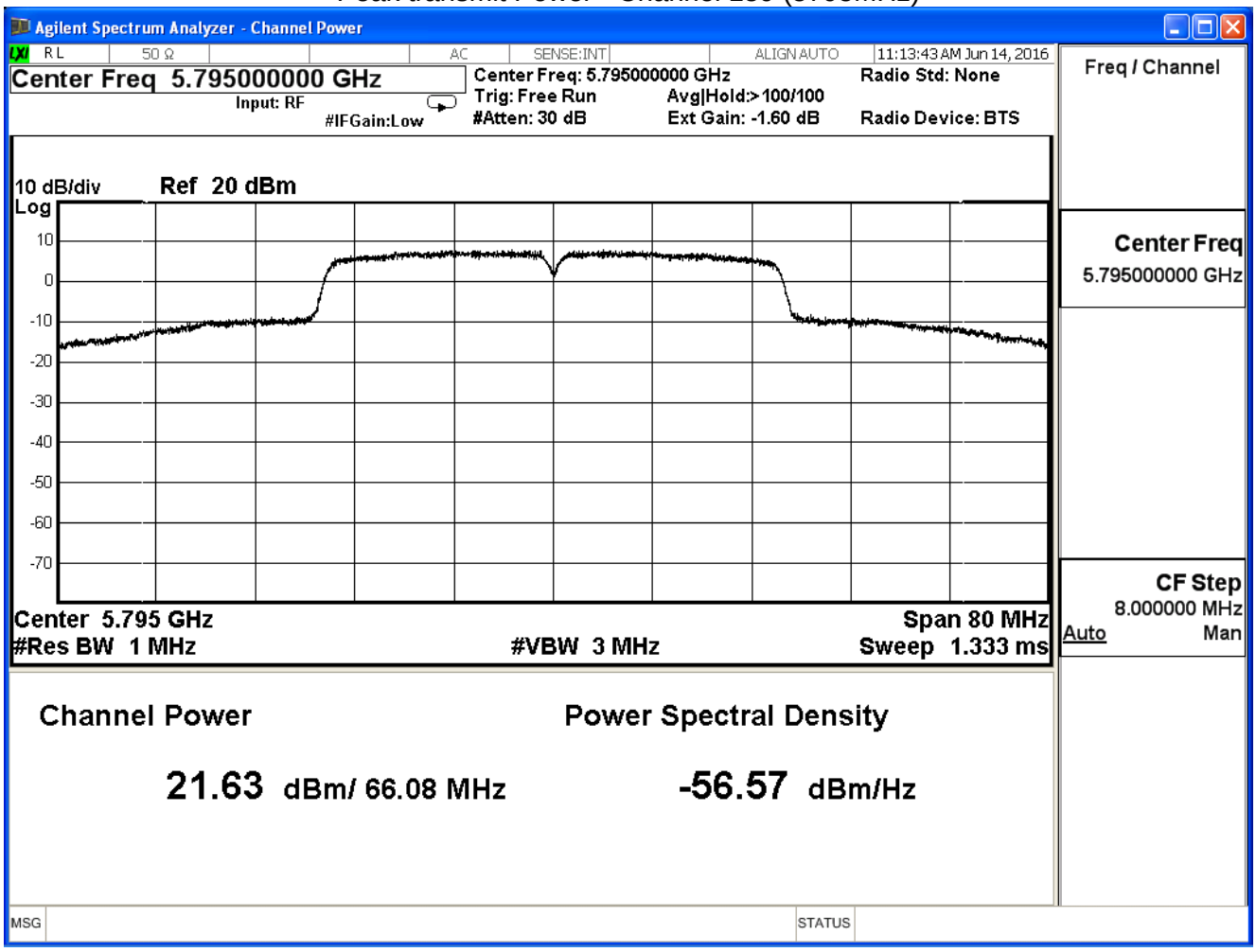
Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
151	5755	18.76	--	--	--	--	--	--	--	≤28.24dBm
159	5795	21.63	21.52	21.44	21.32	21.24	21.05	20.93	20.72	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 151 (5755MHz)



Peak transmit Power - Channel 159 (5795MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11n 40MHz(ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	24.79	≤28.24
159	5795	27.80	≤28.24

The worst emission of data rate is 54 Mbps.

Peak Power Output (dBm)										
MCS Index		24	25	26	27	28	29	30	31	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		54	108	162	216	324	432	486	540	
151	5755	24.79	--	--	--	--	--	--	--	≤28.24dBm
159	5795	27.80	24.55	24.39	24.27	24.17	24.00	23.90	23.73	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11ac 80MHz (ANT 0)

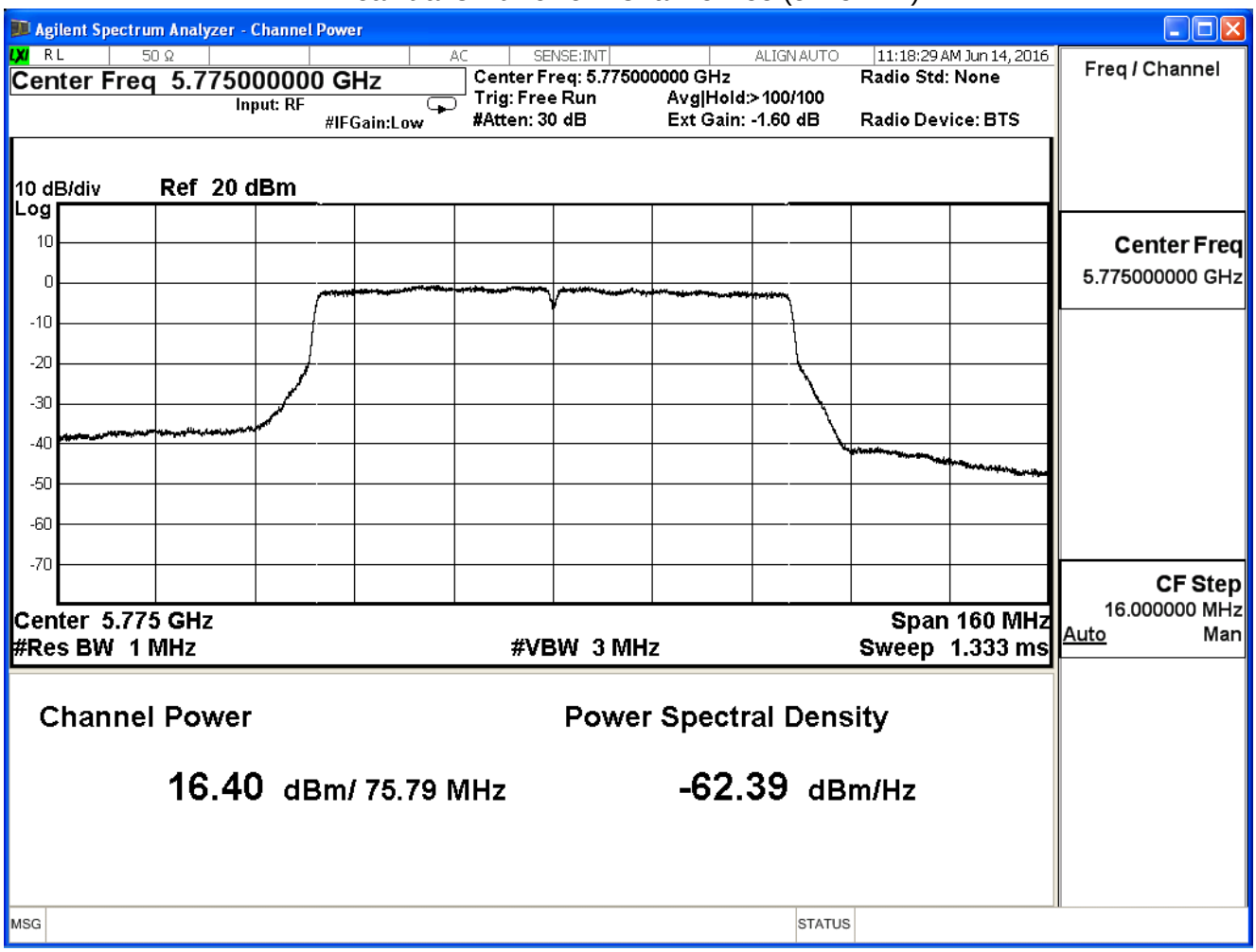
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	16.40	≤28.24

The worst emission of data rate is 117Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	402	936	1053	1170	1404	1560	≤28.24dBm
155	5775	16.40	16.23	16.05	15.95	15.75	15.60	15.44	15.30	15.11	15.03	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 155 (5775MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11ac 80MHz (ANT 1)

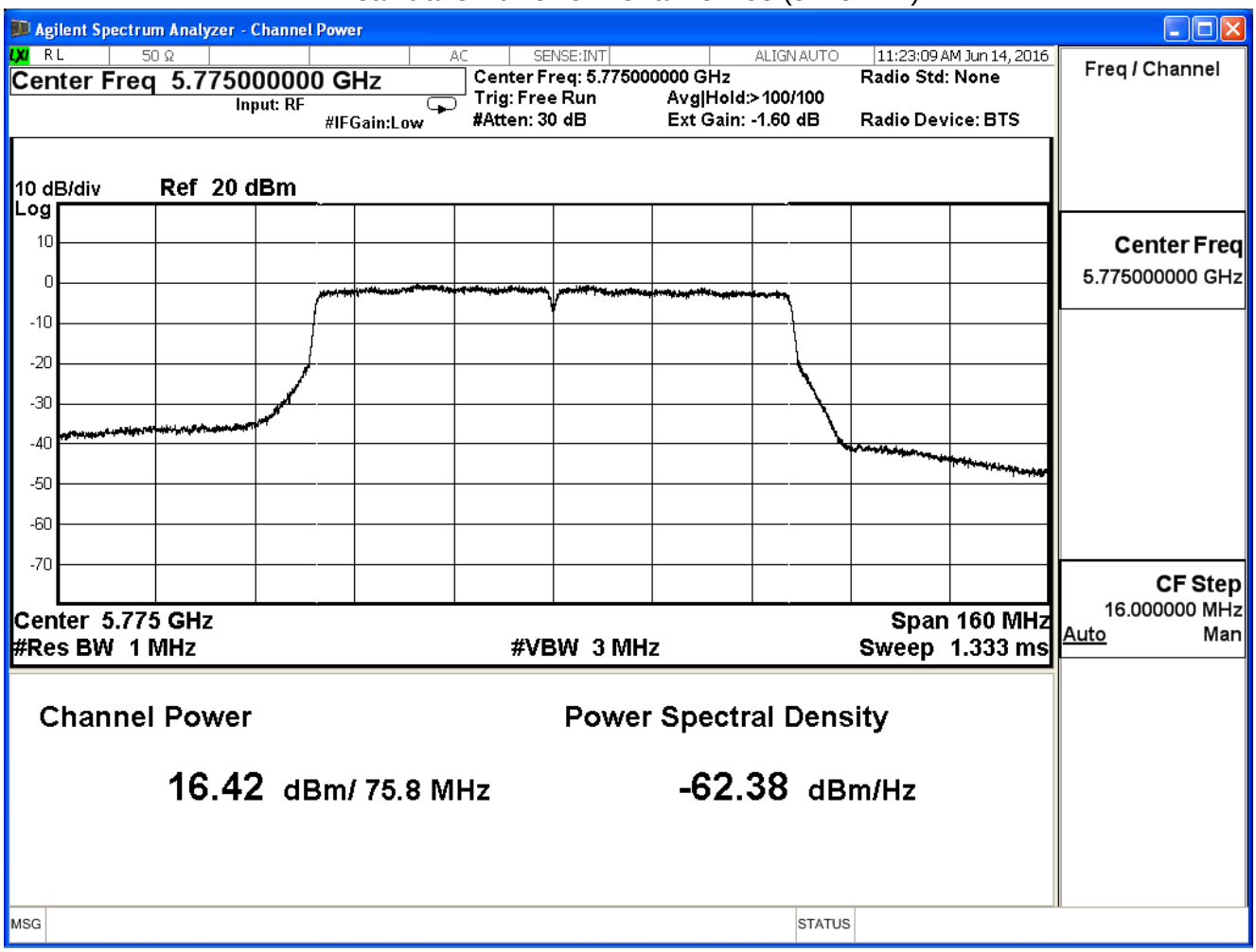
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	16.42	≤28.24

The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	402	936	1053	1170	1404	1560	≤28.24dBm
155	5775	16.42	16.30	16.19	16.00	15.93	15.75	15.44	15.02	14.93	14.88	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 155 (5775MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11ac 80MHz (ANT 2)

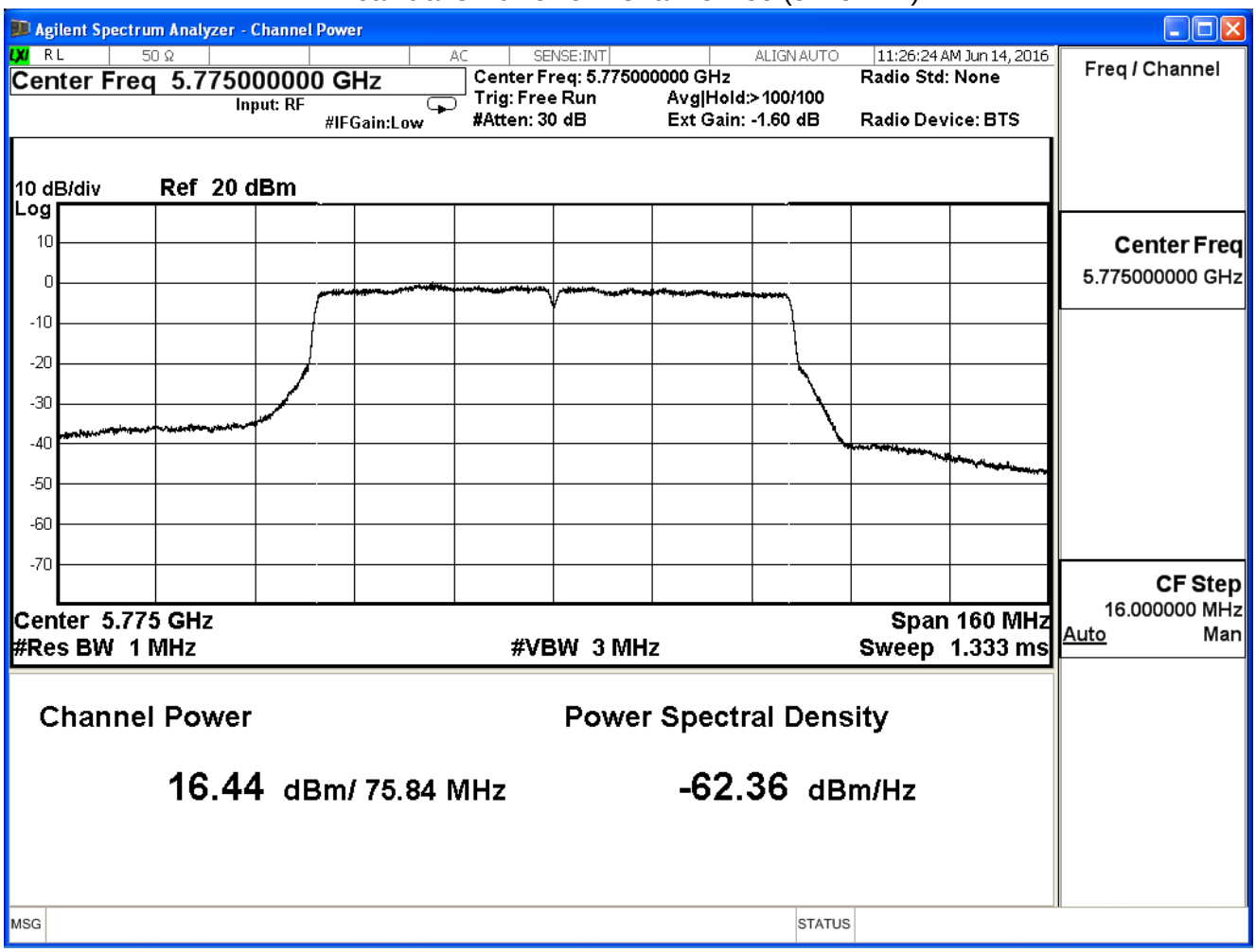
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	16.44	≤28.24

The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel	Frequency	Data Rate										
No	(MHz)	117	234	351	468	402	936	1053	1170	1404	1560	≤28.24dBm
155	5775	16.44	16.20	16.02	15.88	15.68	15.42	15.18	15.03	14.93	14.77	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 155 (5775MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11ac 80MHz (ANT 3)

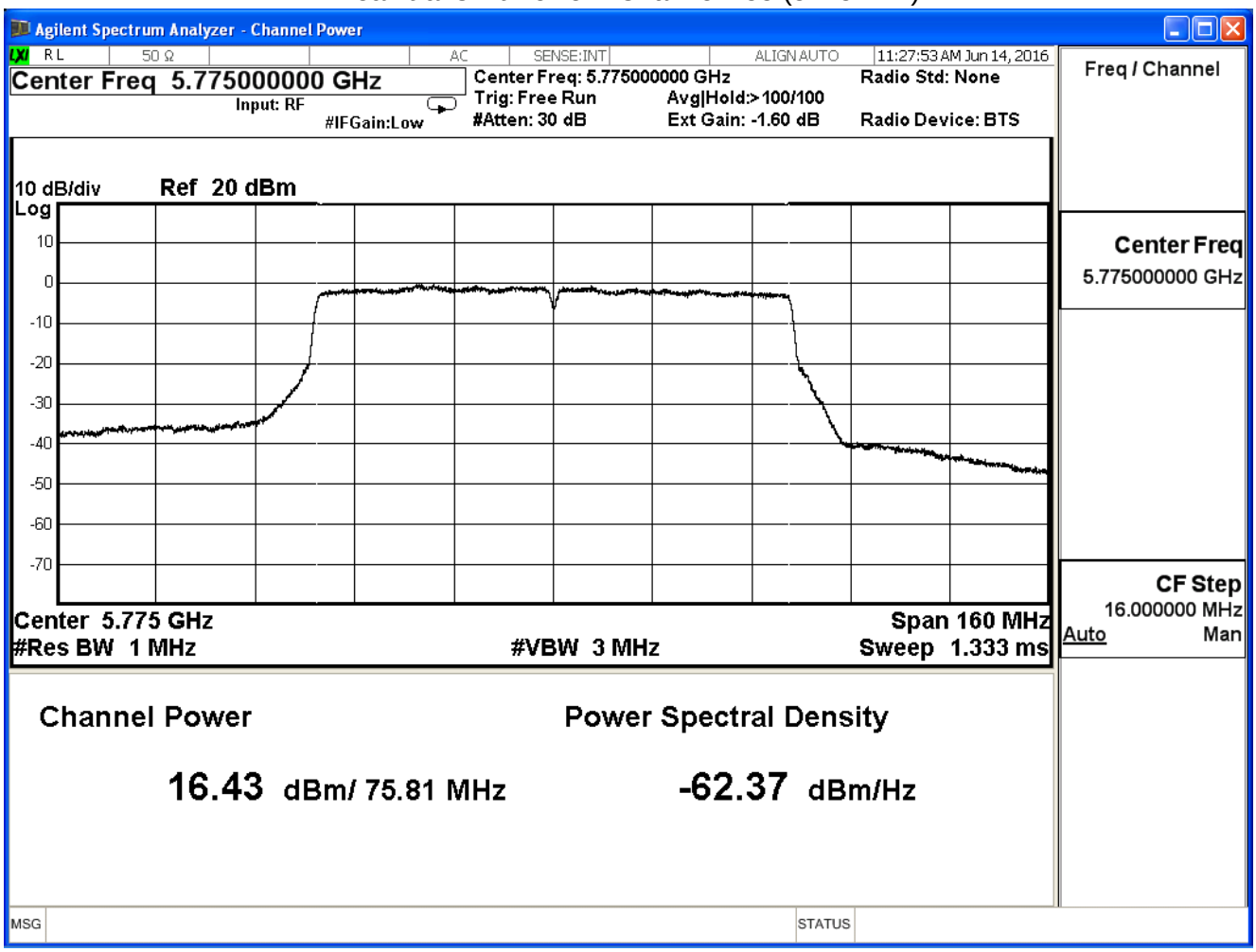
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	16.43	≤28.24

The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	402	936	1053	1170	1404	1560	≤28.24dBm
155	5775	16.43	16.20	16.04	15.93	15.70	15.50	15.34	15.22	15.04	14.91	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi

Peak transmit Power - Channel 155 (5775MHz)



Product	Wireless-AC1700 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: TX_Beamforming Mode (11 n20/n40/ac80)_ ADP1		
Date of Test	2016/06/14	Test Site	SR7

IEEE802.11ac 80MHz (ANT 0+1+2+3)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	22.44	≤28.24

The worst emission of data rate is 117 Mbps

Peak Power Output (dBm)												
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		117	234	351	468	402	936	1053	1170	1404	1560	≤28.24dBm
155	5775	22.44	22.25	22.09	21.95	21.78	21.57	21.33	21.12	21.00	20.88	

Array Gain: = 7.76 dBi
Limit=30-(7.76dBi-6dBi)=28.24dBi